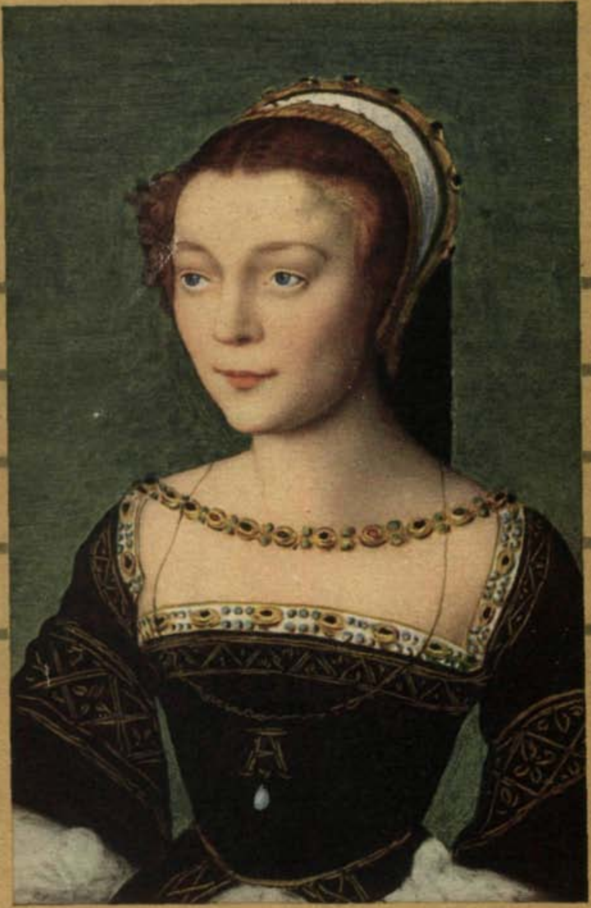
CORONET

"INFINITE RICHES IN A LITTLE ROOM"



JAMES M. MILNE LIBRARY
WITHDRAWN
SUC AT ONEONTA, N. Y.

JANUARY, 1937

THIRTY-FIVE CENTS

IN GREAT BRITAIN 2/6

FACTUAL

A Doctor Discovered 19
Stop-and-Go-Carts * 45
Time is Man-Made * 81
Magic Syllables * * 99
Fantasia in F Minor 155
Color As a Force * 191

FICTIONAL

The Pearl Necklace 15
A Cowboy's Holiday 113
Old Number Four * 174

UNUSUAL

s This Supernormal? 38
The Isle of Keep-Out 57
The Strangest Animals 147

PERSONAL

Draft for an Obituary 3

HISTORICAL

776: A Close-up * * 93
The First Submarines 136

SATIRICAL

've Got a Great Idea 51

CULTURAL

David Fredenthal * 6-8
Persian Miniatures 9-12
Gilbert Stuart * * 13-14
Less Wagner, Please 76
Watches (17th cent.) 85-92
Watches (18th cent.) 105-112
The Dice Players (Insert)

PICTORIAL

ugo-Slav Symphony 25-37
Studies * * * * 62-67
Seasons * * * 68-69
Nature * * * * 70-71
Animals * * * 72-75
Human Interest 122-127
Landscapes * 128-129
Marine * * * 130-131
Children * * 132-135
Strange * * 160-163
Portraits * * 164-165
Street Scenes * 166-167
Composition * 168-173
Color Cartoons 183-190

COVER DESIGN: Portrait
f La Duchesse d'Estampes
y CORNEILLE DE LYON

A 40206

CORONET
for
JANUARY
1937

TEXTUAL FEATURES

FACTUAL:

A Doctor Discovered
Paul E. Ackerman 19
Stop-and-Go-Carts
Sydney Steele 45
Time Is Man-Made
Hendrik Willem van Loon 81
Magic Syllables
Ralph Cannon 99
Fantasia in F Minor
George W. Gray 155
Color As A Force
Faber Birren 191

FICTIONAL:

The Pearl Necklace
Bill Behm 15
A Cowboy's Holiday
Henry Harvey 113
Old Number Four
Donald Hough 174

UNUSUAL:

Is This Supernormal?
Theodore Besterman 38
The Isle of Keep-Out
J. C. Furnas 57
The Strangest Animals
Willy Ley 147

PERSONAL:

Draft for an Obituary
H. G. Wells 3
About David Fredenthal
H. S. 6

HISTORICAL:

1776: A Close-up
Edward M. Barrows 93
The First Submarines
Harry von Kolnitz 136

SATIRICAL:

I've Got a Great Idea
J. C. Fistere 51

CULTURAL:

Less Wagner, Please
Rev. Tyler Turner 76

MARGINAL:

Those Good Old Days
Otto S. Mayer 17
Mrs. Dunbar at Dinner
O. S. M. 80
Automobiles
Parke Cummings 152
Mr. Tumbine's Guilty Feeling
O. S. M. 182

PICTORIAL FEATURES

COVER:

La Duchesse d'Estampes
Corneille de Lyon
(Courtesy of the Metropolitan Museum of Art, New York)

CULTURAL:

MODERN PAINTINGS

Head . . David Fredenthal 7
Study . David Fredenthal 8

CLASSIC PAINTINGS

Four Indo-Persian Miniatures 9-12
Two Gilbert Stuart Portraits 13-14
The Dice Players by Le Nain
(Insert Opp.) 98

DRAWINGS

Those Good Old Days
George Grosz 17
Harvest Time, Heinrich Kley 18
The Addicts. Heinrich Kley 21
The Ice Waltz, Heinrich Kley 43
Speed Demons
Heinrich Kley 44
Dance of Youth
Heinrich Kley 49
Dance of Age, Heinrich Kley 50
The Old Roué, Heinrich Kley 56
Mrs. Dunbar at Dinner
George Grosz 80
Watches
Hendrik Willem van Loon 84
A Love Story. Heinrich Kley 115
Lights Out . . Heinrich Kley 116
The Auctioneer
Heinrich Kley 120
Mr. Tumbine, George Grosz 182

Continued on inside back cover

DAVID A. SMART
PUBLISHER

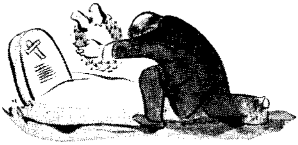
CORONET
Jan. 1, 1937

CORONET is published monthly by David A. Smart. Publication, Circulation and General Offices, 919 North Michigan Avenue, Chicago, Illinois. Entry as second class matter applied for at Post Office at Chicago, Illinois, under Act of March 3rd, 1879. Subscriptions for the United States, and possessions, Canada, Cuba, Mexico, Central America, and South America, $4.00 a year in advance; elsewhere $5.00 a year.
Entire Contents copyrighted 1936 by David A. Smart

Vol. 1, No. 3
Whole No. 3

DRAFT FOR AN OBITUARY

AN INTIMATE ESTIMATE OF ONE WHO ALWAYS WROTE OF THINGS TO COME



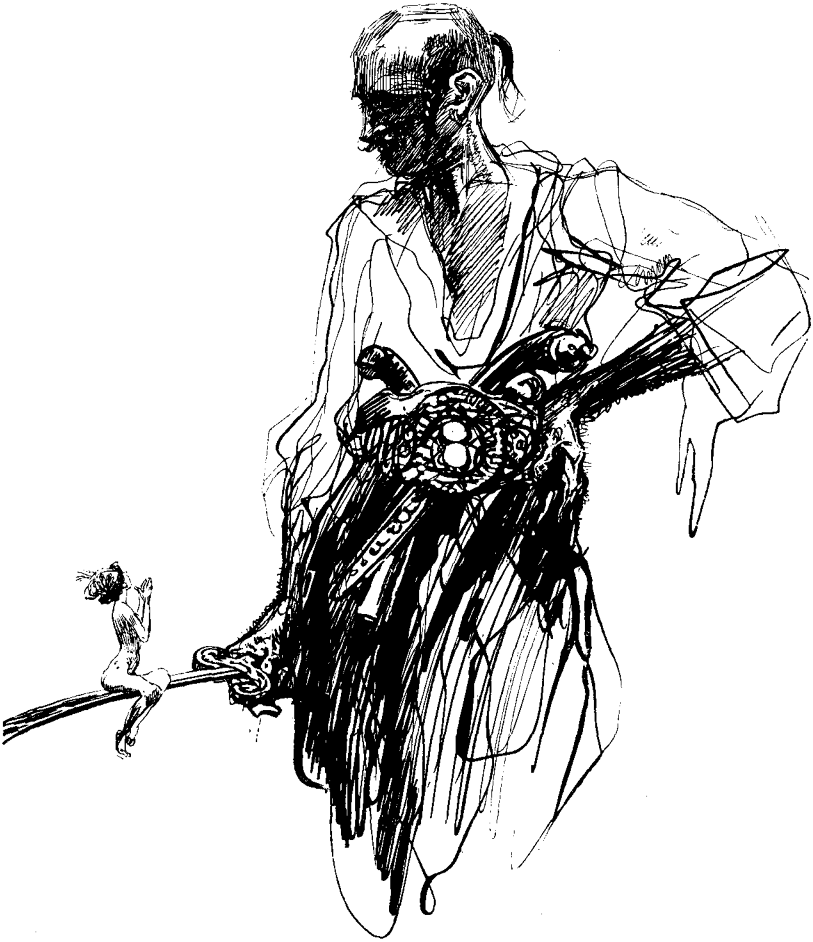
THE name of Mr. H. G. Wells, who died yesterday afternoon of heart failure in the Paddington Infirmary at the age of 97, will have few associations for the younger generation. But those listeners whose adult memories stretch back to the opening decades of the present century and who shared the miscellaneous reading of the period, may recall a number of titles of books he wrote and may even find in some odd attic, an actual volume or so of his works. He was indeed one of the most prolific of the "literary hacks" of that time, he not only wrote books himself, but critical studies and even short volumes were written about him, and the entries under his name in the catalogue of the British Museum reach nearly six hundred.

An interesting study of Wells was broadcast five years ago from the London centre by Miss Phelps Lemon, and little has arisen since to modify her verdict. She describes him as something between a portent and a pioneer. He wrote a very frank and explicit autobiography which was published in 1934 and he added a supplement which though it has never been printed, is accessible to the curious in the manuscript collection in the British Museum. From these documents we learn that his origins were common, and socially if not chronologically he reached back to the eighteenth century and the ascendency of the British "landed gentry." He was born in 1866, his father was a gardener who became a small shopkeeper and professional cricketer and his mother was the daughter of an old world innkeeper and before her marriage a "lady's maid" and subsequently a "housekeeper." The most interesting thing about Wells was his refusal to accept the social inferiority to which he seemed to be born and the tenacity with which he insisted upon his role as the free citizen of a new world that was arising out of the debacle of the warring national states of the nineteenth and early twentieth centuries. He had a flair for "what is coming." He was a liberal democrat in the sense that he claimed an unlimited right to think, criticize, discuss and suggest, and he was a socialist in his antagonism to personal, racial or national monopolization. It was his vanity to compare himself to Roger Bacon, and his attempts to anticipate the comprehensive synthesis of our present *World Encyclopaedia*, in his now forgotten *Outline of History*, his *Work, Wealth and Happiness of Mankind*, his contributions to the Science of Life and his Anatomy of Frustration, are still remarkable having regard to this period, for the boldness of their aim, even if the necessary impatience, limitations and ineptitudes of his treatment disqualify them now as serious contributions to general education. Wells was a copious and repetitive essayist upon public affairs and a still more copious writer of fiction. He wrote scientific romances, whose original freshness has long since been destroyed by the general advance of knowledge, and novels which have neither the circumstantial correctitude which give his contemporaries Galsworthy and Bennett their documentary value, nor that ruthless frankness which endow such work as Maugham's *Ashenden* and so much of the younger American school of that time, with a sort of bleeding immortality. Wells was essentially an intellectual with an instinctive dislike for the vehemencies, the zeals, patriotism and partizanships, intensities and emotional floods of life. When he dealt with passion he was apt to write insincerely. His keenest feeling seems to have been a cold anger at intellectual and moral pretentiousness. The question whether he was to be considered a "humorist" was never settled and it need not trouble us now.

He was seriously injured in a brawl with some Fascist roughs brought about by a rare fit of indignation on his part in 1938, and his health was further impaired by a spell in a concentration camp under the brief communist dictatorship of 1942. Thereafter his once considerable vitality seems to have deserted him. He had no recorded share in the vigorous mental and social renascence we have witnessed in the past decade, in spite of the fact that it followed so closely upon lines he had foreshadowed. From being a premature, he became a forgotten man. His immediate needs were relieved by a small civil list pension in 1955. He occupied an old tumble-down house upon the border of Regent's park and his bent, shabby, slovenly and latterly somewhat obese figure was frequently to be seen in the adjacent gardens, sitting and looking idly at the boats on the lake or the flowers in the beds, or hobbling painfully about with the aid of a stick, coughing or talking to himself. "Someday," he would be heard to say, "I shall write a book, a *real* book."

Miss Phelps Lemon has compared him not inaptly to a reef-soliding coral polyp. He was much more the scientific man than the artist though he dealt in literary forms. Scarcely anything remains of him now and yet without him and his like the reef of common ideas on which our civilization stands could never have arisen.

—H. G. WELLS

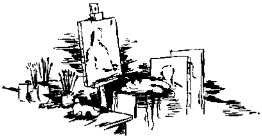


"Please, I'll Be Friendly!"

With this issue CORONET begins a presentation of the line drawings of Heinrich Kley, the German artist who died in a madhouse a few years back. One of the greatest draughtsmen who ever lived, his drawings have never been available in this country except in books printed, and priced, for the most restricted distribution. The February issue will contain eleven pages of Kley's inimitable drawings of elephants.

ABOUT DAVID FREDENTHAL

A NOTE ON AN ARTIST WHO IS NOT AS WIDELY KNOWN AS HE SHOULD BE

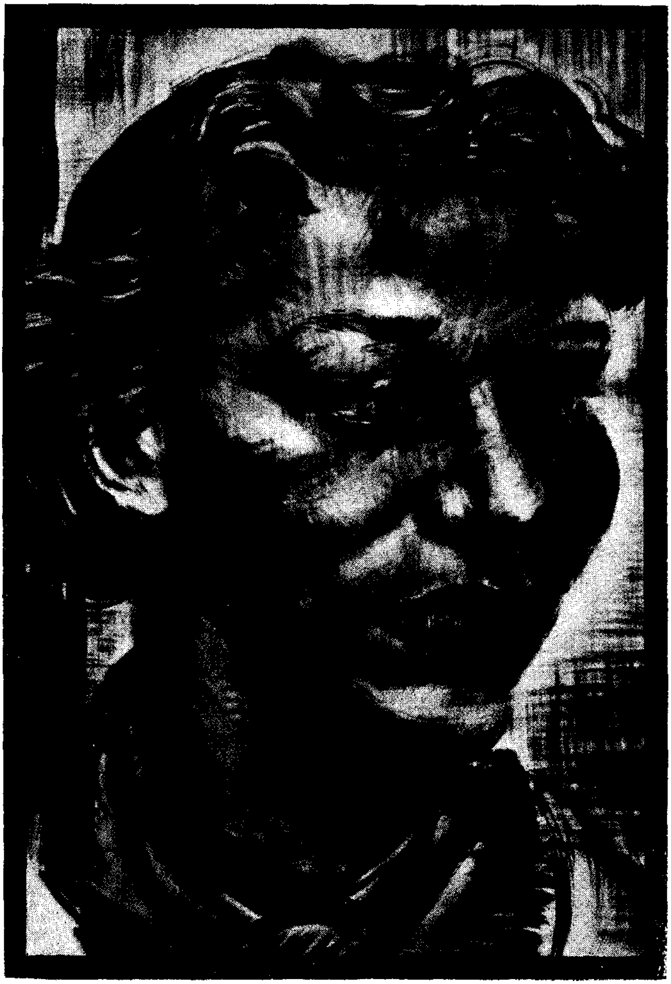


THE story of David Fredenthal, brief as it is, makes ironic mince meat out of the salon idea of the artist as an indolent and perfumed lapdog.

He was born in the year the World War began and is a son of the depression. He has suffered hunger, cold and loneliness as piercing realities, and not intuitively or as literature. He worked as hard and earned as little as anyone could without being a Chinese coolie. He worked so hard and earned so little that, in contrast, working for the C.C.C. was a glorious liberation. Therefore, when he paints a workingman, he does so out of knowledge intimate enough to be painful. His own sweat is mixed with his colors—when he can afford colors. Most of the time he worked in black and white, and at night, after taking part with the C.C.C. gang in such stimulating activities as chopping down trees, draining swamps, building roads, fighting fires, planting fish, hauling gravel, constructing bridges.

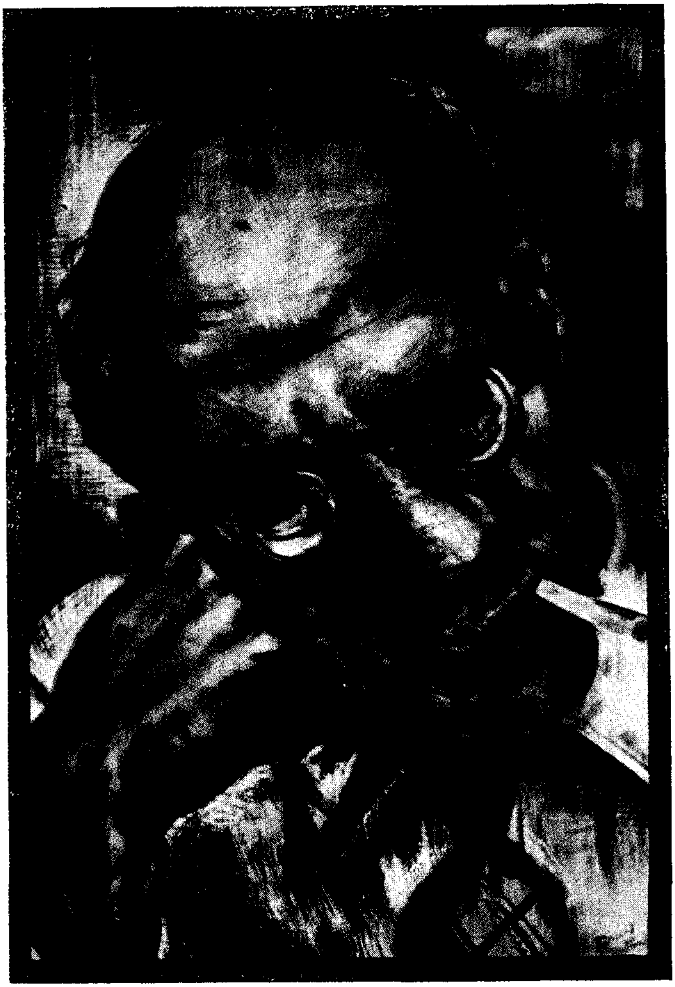
He earned ten cents an hour at his first job, serving as printer's devil and delivery boy. He lived a year on an average of $5 a week, $1 of which he spent for the privilege of drawing in a life class. This was in Detroit, where he was born and the insides of whose factories he knows well. For one month he worked more than nine hours a day, six days a week, for a pay envelope of $2.50. He was a common laborer in the Ford plant and in the Hudson Motor plant and for seven months he served as waiter and deck hand on Great Lakes freighters. And all this time he was drawing during his "leisure." There is no whine in him, for his work in factories gave him material for art which he calls "stimulating and inexhaustible."

The sun really came through when the Museum of Modern Art gave him a traveling scholarship for the purpose of European study. He was abroad three months. The best part of this time was spent in Italy, whose fresco murals so deeply moved him that he resolved to devote himself to that branch of painting. His later drawings have the mural scope. His drawings are not pretty things, are not intended for drawing rooms or museum walls. They may be crude, but they are big. —H. S.



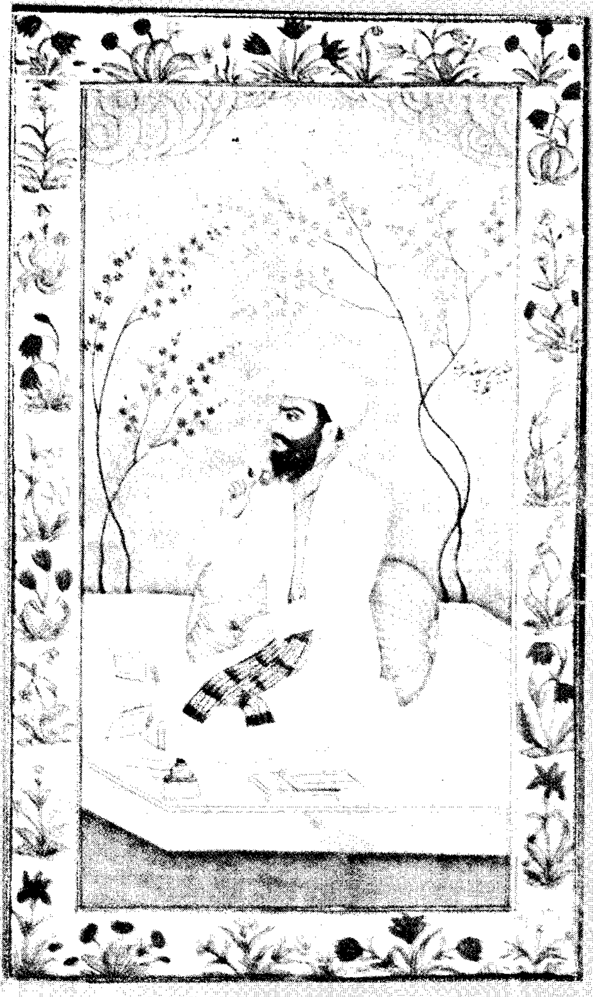
HEAD BY DAVID FREDENTHAL

He has suffered hunger, cold and loneliness. A son of the depression, he has worked for coolie wages. Nor is his struggle over, for he is still far from his ultimate goal. But there is no whine in him, nor in his art. His pictures are at the Downtown Gallery in New York.



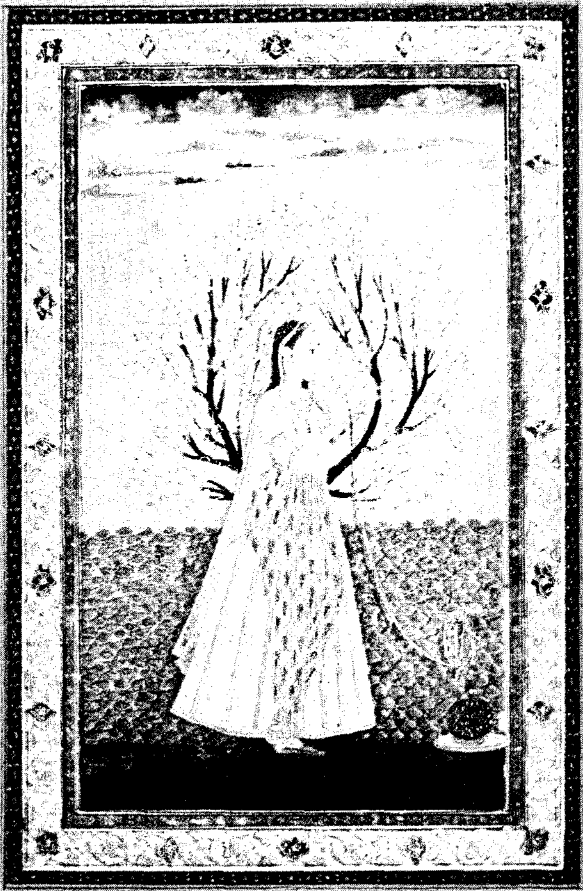
STUDY BY DAVID FREDENTHAL

Some of the unlovely but convincing realism of Dreiser's prose is equaled in David Fredenthal's drawing. No one could be farther from avant-garde artiness than he, yet it may well be from him, and others of his ilk, that the true new-day art will inevitably come.



HARUN OMAR OR MASTER HAFIZ?

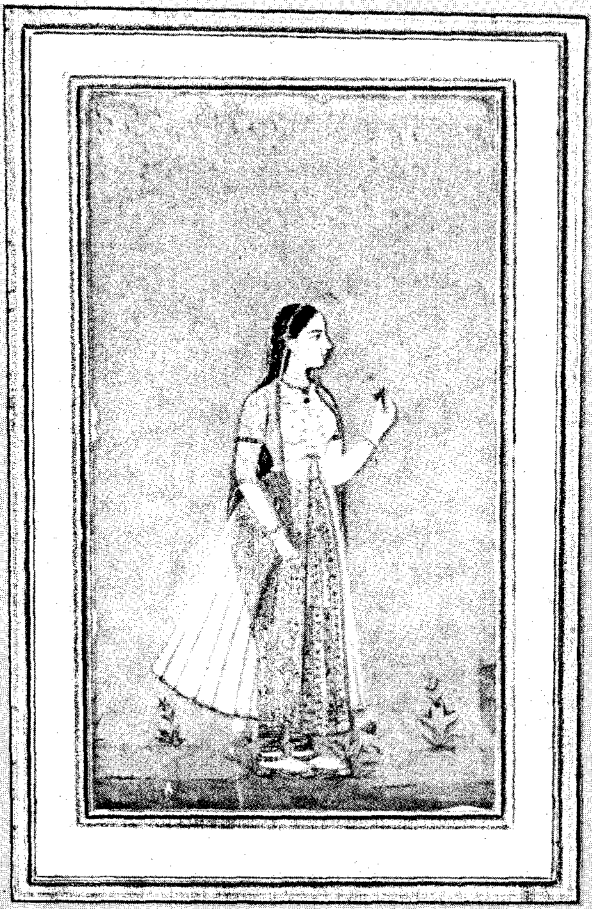
Time, that "eater of all things lovely," has not yet touched the delicate and translucent colors of this Indo-Persian miniature painted in water-color on thin paper three centuries ago, though the name of the artist, or of the poet or scribe who sat as his subject, is no longer known.



INDO-PERSIAN MINIATURES, COLL. L. M. BUCKINGHAM

PORTRAIT OF A LADY OF FASHION

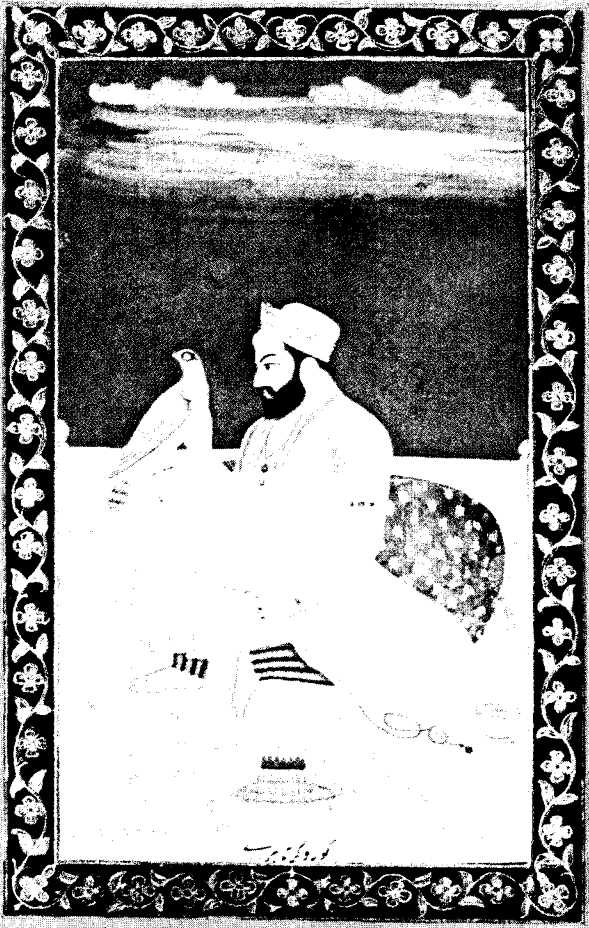
The Mohammedan prohibition of figure-painting made Persian painters, unlike the European, seek patronage outside their church, with the result that many Indo-Persian miniatures tend toward the sophisticated, as witness this eighteenth century lady smoking a water pipe.



PERMANENT EXHIBITION, ART INSTITUTE, CHICAGO

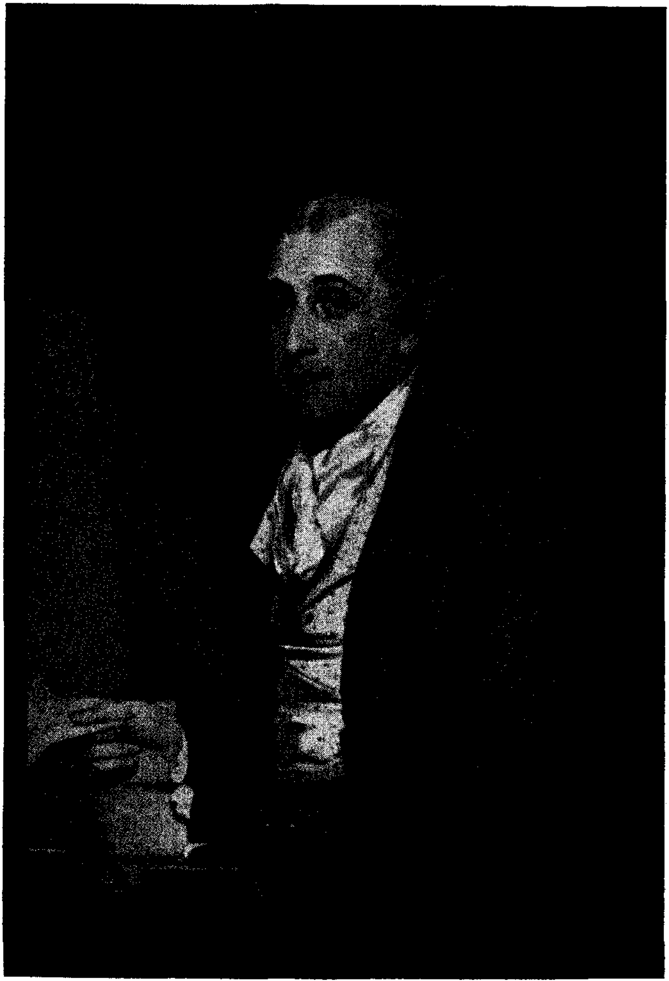
YOUNG GIRL IN A PERSIAN GARDEN

While done in flagrant violation of the tradition of the Prophet, Persian painting was more non-religious than anti-religious, although some extremely licentious pictures were made for rich patrons who were willing to encourage an art that flourished outside the church law.



PORTRAIT OF A PERSIAN SPORTSMAN

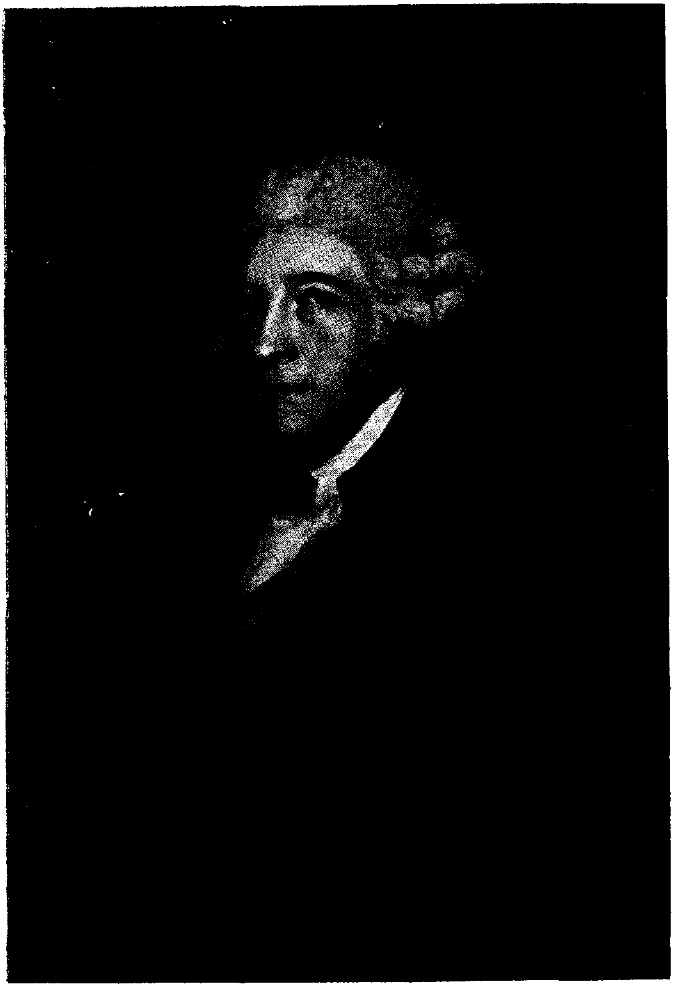
Typical of the wealthy worldlings under whose patronage the pictorial artists were enabled to exist, this early nineteenth century Indo-Persian miniature depicts a young blood holding a tethered falcon. Painted in delicate watercolors and in gilt on paper incredibly thin.



M. KNOEDLER & CO., EX. COLL. DR. HOWARD TOWNSEND

WILLIAM BAYARD BY GILBERT STUART

William Bayard, the son of one Tory and married to the daughter of another, remained in New York after his parents fled in 1784, leaving all their property to be confiscated. This portrait, inherited by his great-grandson, was lent by him for a recent Knoedler exhibition.



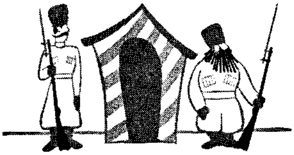
M. KNOEDLER & CO., EX. COLL. J. S. FREYLINGHUYSEN

CALEB WHITEFOORD BY GILBERT STUART

The Secretary of the British Commission which conducted the peace negotiations after the Revolutionary War, Caleb Whitefoord was a London wine-merchant, an art collector, a friend of Benjamin Franklin and a member of Dr. Johnson's circle. In the Knoedler exhibition.

THE PEARL NECKLACE

A RUSSIAN PRINCESS FINDS THERE IS A MILK OF HEAVENLY KINDNESS



"ONLY on one occasion in my life have I fainted," declared Princess Kokoschka with a prim toss of her fair-haired head, "and even then it occurred quite half an hour after the real ordeal was over." It was another of her famous tea parties that she was giving and today the charming hostess was at her best, lovely and gracious as she moved about in the rather small room with its wine-red upholstery and wall paneling to match. We had seated ourselves and were in expectant mood for really we knew nothing at all about her earlier life except that it had been lived in quite another world, beyond the borders, as it were. It was obvious, however, that whatever may have been the nature of her experiences, it had not succeeded in robbing her of her fine bearing and inbred distinction. Actually, she had "brought over" with her very little else. Today she was going to allow us a glimpse into her past.

"My husband," she began, "was murdered by the Bolsheviks and only after protracted negotiations lasting several years did I obtain permission to leave Russia. My first intention was to get through to Germany, but once there what was I to set about doing until I had discovered a possibility of earning a livelihood? There were still a few pieces of jewelry I could call my own and so I made up my mind to take them with me. I had them sewed into my daughter Erica's teddy-bear. Erica was only six years of age at the time and, of course, she knew nothing at all about my resolve.

"In the train that was taking us towards the frontier I met Countess Stolkolski who had likewise obtained permission to leave the country. We were taking the same route and hence decided to keep together as much as possible. Shortly before reaching the frontier, the Countess suddenly confessed to me that she was carrying concealed on her person a valuable pearl necklace.

"'What!' I said aghast. 'Do you not realize the great risk you are running? If you have merely concealed it on your person, it will most certainly be discovered and the penalty for smuggling of this kind is death.'

" 'But what else can I do? It is the only valuable thing I have been left with,' she moaned, half imploring me to aid her in her distress.

"We tried to think out a course of action, but we failed to conceive any promising plan and with every minute the train was drawing nearer to the frontier station. At last, acting under a sudden impulse, the Countess took my little Erica's milk bottle that was standing on the small collapsible table near the window and, with a quick movement of her hand, slipped the pearl necklace into the milk and placed the bottle back into its original position. The bottle was half full of milk and the opaqueness of the pearls so closely approximated the color of the milk that the necklace became practically invisible.

" 'Just let's leave the bottle standing where it is,' she said, 'nobody will take the slightest notice of it at all.'

"As we approached the frontier station we became more and more excited. We knew that our whole fate depended upon the outcome of the next few hours. Men and women wrapped up in heavy fur skins were rushing to and fro on the platform creating a frightful confusion. We wriggled our way through the crowd and entered the inspection room.

"The examination of our luggage was to be carried out by armed soldiers. Every single trunk and parcel was opened and scrutinized with the utmost care. Then we had to line up in front of small cell-like rooms. In these rooms slatternly-looking females subjected us to a bodily inspection, a procedure which they carried out to the accompaniment of biting remarks. Erica, too, was gone over from head to foot, but curiously enough her teddy-bear was not ransacked. At last, this ordeal was over and we still survived. We were then made to pass through a second hall where a commissary stood inspecting our permits and passports. He was a man with a terribly hard and callous eye and many of those who had safely come through the first inspection found themselves held up here because he ruled that their passports were not quite in order.

"Pale and trembling from excitement and shivering in the icy wind that was blowing across the station, we again found ourselves on the platform. The train had been shunted on to a siding. We were given permission to take our seats in the train again. The examination had lasted almost three hours. The carriage itself had become icy cold, too, as evidently the heating had been cut off. We began to breathe more freely upon getting back into our own compartment, but the danger was by no means passed. A new examination might be ordered at any moment. We were much too agitated to talk and gazed out of the window at the platform, feverishly waiting for the signal to get under way.

"Of a sudden came the sound of the heavy tread of soldiers moving down the corridor towards our compartors were wrenched open amed. Our doom seemed im- nt. Now they were in the ad- ning compartment from which we could overhear the sounds of a great commotion. It was now our turn, the door was flung open, a sinister-looking Bolshevik stood in the doorway, armed to the teeth, looking at us quizzically. He did not move but merely allowed his stare to become more and more threatening from second to second, although it seemed like minute to minute. We wanted to scream but were unable to utter a sound.

"Then the gaze of the soldier began to move slowly as he scrutinized each piece of luggage, the child that had huddled up close to me, the teddy-bear and . . . raising his hand, took a pace forward towards the window and, with a disgustingly triumphant grin, pointed to the milk bottle.

"It was the most agonizing moment of my life. My heart was throbbing wildly. The Bolsheviks had robbed me of everything I possessed except . . . and now that, too, seemed lost. Go ahead, go ahead and be done with it, I thought, and pressed my child against my side.

"The soldier took another grinning look at us, then he took the bottle and tipped it up—"

The Princess leaned back in her chair, slightly pallid from the terrifying strain of memory. Impatient voices were demanding:

"Well? So? And then? What happened?"

The words escaped from the Princess's lips: "Nothing happened. The milk was frozen." —BILL BEHM

THOSE GOOD OLD DAYS

See this gentleman fume and fret!

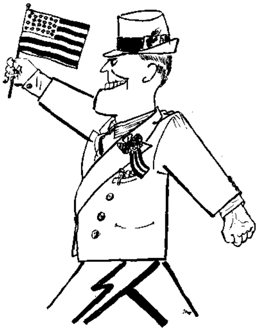
If Washington would only let things
alone!

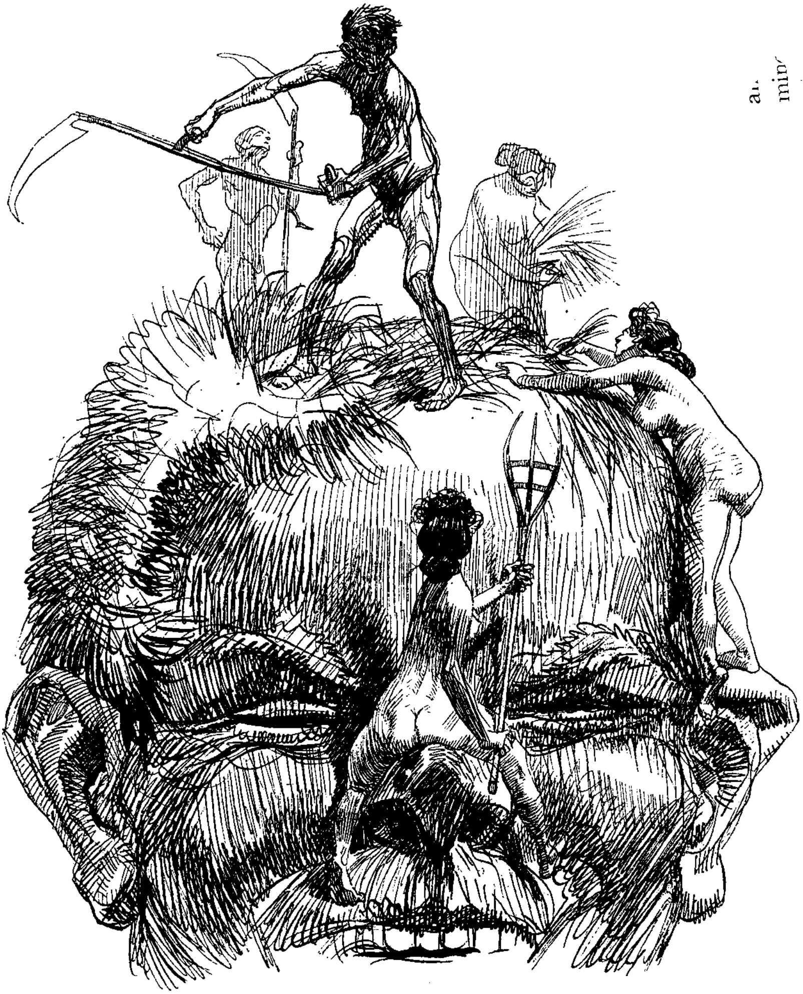
He wants the good old days.

Not Hoover—not Coolidge—not
Harding.

Probably he means Abraham
Lincoln.

—OTTO S. MAYER





HEINRICH KLEY

HARVEST TIME

A DOCTOR DISCOVERED

WATCHING A DOG TREAT ITS OWN WOUNDS INSPIRED AUTO-THERAPY

I HAVE discovered a doctor!

He is now past seventy years old, and it is about time that somebody discovers him. Many others have discovered this doctor before I came along, but not one has reported his discovery in print for the layman, because the doctor tells me that no American newspaper or magazine has ever printed anything about him and his work.

His name is Dr. Charles Henry Duncan. His residence and his office is in Park Avenue, in New York City.

Dr. Duncan is notable in that he uses little or no medicine in his practice. He has cured many varieties of infectious diseases with his method of treatment—and he has cured them quickly. No pneumonia patient of his has failed to recover. He has never found it necessary to operate for mastoid—no matter how severe the infection was when he entered the case. He has cured patients with whooping cough, sinus involvements, common colds, sore throats, infections of the eyes, puerperal infections and gynecological infections—without medicines or operations.

His method is so simple that almost anyone would scoff at hearing of it for the first time. Nevertheless, his method of treatment can be found in any standard medical dictionary under "The Duncan Method of Treatment." Yes, the "Duncan" in the medical dictionaries is this same Dr. Duncan!

Yet, for twenty-five years, Dr. Duncan's method of treatment has felt the stigma of controversy. Today, although it is practiced successfully by many physicians, it is condemned by others, and as a result it is little known by those not familiar with the medical profession. At one time, Dr. Duncan was recommended for the Nobel Prize, by a group of well-known and reputable medical men. He was decorated by the French Government in 1932, as Commander of the Order of Honor and Distinction, in recognition of his work. But despite all this, only recently a national news syndicate serviced its clients with a wire story about a western medical scientist who discovered a principle that would revolutionize our ideas of curative medicine—and the "new" discovery was substantially Dr. Duncan's theory.

Dr. Duncan's method of curing infectious diseases is called "autotherapy." In curing his patients by autotherapy, Dr. Duncan utilizes the innate forces of self-preservation that are set up in the human body by nature. These forces—startling as it might seem to the average person—are to be found in the pus or discharge of the infection. And what might seem even more startling is the fact in curing a patient of an infectious disease, Dr. Duncan simply administers a filtrate of pus, either orally or hypodermically. He lets nature do the rest, and his patients always recover.

"There is no secret formula for my method," Dr. Duncan said to me. "I want the whole world to know about it!"

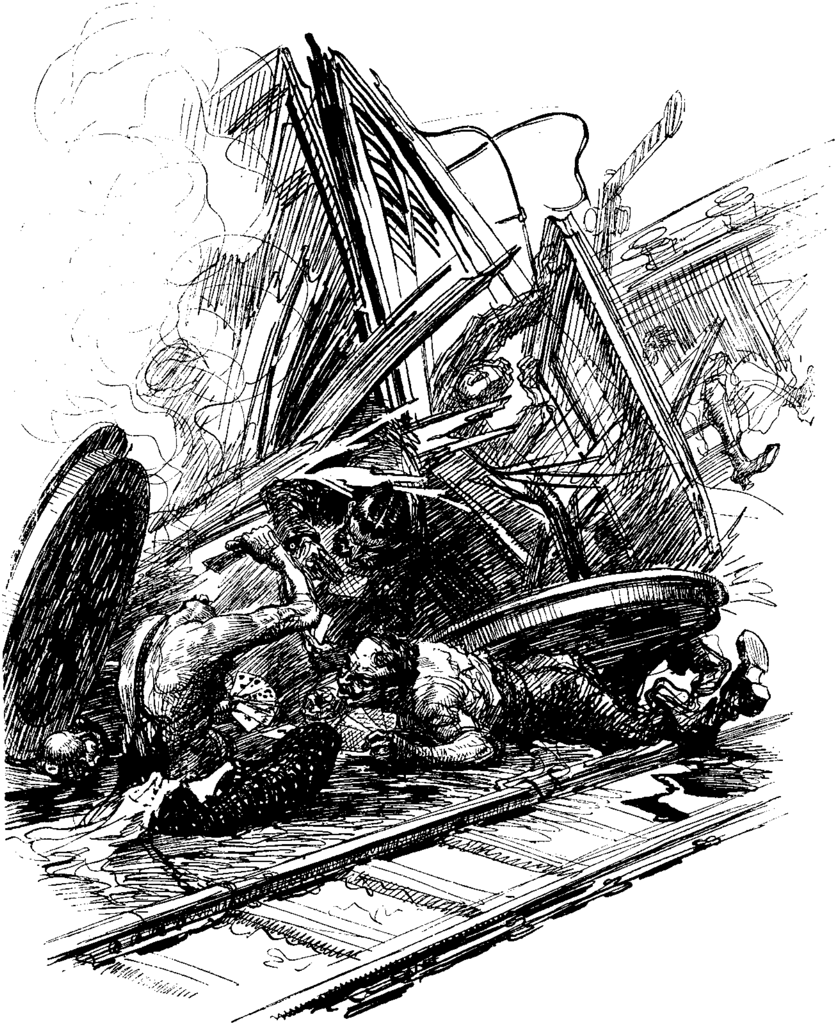
"There is a short circuit somewhere in medicine," he continued, "because so many lives are snuffed out by infectious diseases. Back in 1910, I began asking myself serious questions about this loss of life from infection. I thought of the dog, who laps and cures his foot in one hundred per cent of his injuries. I wrote out all the evidence for and against the problem, basing everything on the dog.

"The only positive evidence I had was that when the dog gets a wound, he has no antiseptics. Neither does he practice asepsis. He does not have sterile gauze, nor is he able to tell anyone about his injury. He does not know that there is such a thing in the world as infective germs or bacteria. Yet, in spite of the lack of these human aids and knowledge, his wounds always heal.

"That the dog cures his wounds by the mechanical action of the tongue is a time-worn theory that I disproved. Neither does the dog cure his wounds by any antiseptic qualities of the saliva. But, he cures them by a biological reaction. He simply transfers the germs from the wound to his mouth, by means of the tongue. This causes his body tissue to develop the curative reaction—and nature does the rest."

His next step was to obtain an injured dog for observation and experimentation. He procured an injured Gordon setter with a deep foot wound. He gave the dog a private room in a hospital. Then, with the knowledge that if the dog were allowed to lap his foot the wound would heal quickly, he put a plaster cast on the dog in such a way that he was unable to touch the wound with his tongue. Then he dressed the wound daily with antiseptics and sterile gauze, just as he did his human patients.

Infection set in on the dog's foot, and progressed for three weeks. The dog was about to die. He had stopped eating, sleeping and drinking. His eyes were listless and his mouth drooped. The foot had swollen and was filled with pus. At this point, Dr. Duncan took three drops of pus from the wound, and gave them to the dog in a teaspoon. He had to open his mouth widely, tip back the dog's head and let the pus run down his



HEINRICH KLEY

THE ADDICTS

JANUARY, 1937

throat. The dog started licking his chops eagerly—something he had not done for days. Dr. Duncan then drained additional pus from the wound for future treatments. In twenty-four hours, the remaining pus in the wound had dried. The dog was given more pus, from the reserve that had been drained, and in thirty-six hours healthy tissue began to form. In one week, with repeated treatments, the dog was well.

On the very day that Dr. Duncan sent the dog back to his master, well and with his foot thoroughly healed, two cases of dying young mothers suffering from puerperal infections following childbirth came under his care.

A priest had already given one of the young women the last sacred rites of her church. Both of the women had been brought to the hospital ostensibly to die there, and they both had given up hope.

A physician is justified in giving a dying patient anything he sincerely believes will bring about a cure. This professional creed, coupled with enthusiasm over what he believed to be a revolutionary discovery in medical science, prompted Dr. Duncan to apply his principle to these patients. Accordingly, pus was drained from the infection of each woman, and a solution was made for each in distilled water.

This was given to the women in the same manner as the dog was treated.

The next morning, he found that his first two human patients treated by the newly discovered method had both slept ten hours. Both were entirely out of danger. In two weeks, both had left the hospital, and were back home with their babies.

Shortly afterwards, when Dr. Duncan was summoned to a dangerous case of infection which resulted from compound fractures of two bones in a man's left leg, he believed that he could get conclusive proof of his theory.

He was compelled, however, to begin with accepted methods. Dr. Duncan entered the case on the first day of its third month. By this time, the left leg was almost hopelessly infected. There were severe bruises with no abrasions over the right leg.

To begin treating the case, the patient was anaesthetized, and the wound was opened and drained thoroughly. This was the accepted method. Three days later, the patient complained of severe pains in the right leg. The calf was swollen, hard, the skin tense and no fluctuations. On the next day, there was marked fluctuation of the right leg. Temperature was 104° F, pulse 120 and respiration 30.

Dr. Duncan opened this wound, and drained eight ounces of pus. Two rubber drains were inserted through the right leg, and the pus pockets broken up. Both limbs were dangerously infected by this time. The patient's temperature came down to 101° F following the pus evacuation, but rose gradually to the 104° F temperature again.

For the next three days, the patient was given forty million streptococcus pyogenic stock vaccine hypodermically, with no appreciable results.

The patient was losing flesh rapidly, and becoming markedly septic. His skin turned yellow, and he was evidently absorbing pus.

On the twelfth day, he was given autogenous vaccine, but without any gratifying results.

Ten days later, it was necessary to amputate the left leg above the knee.

Then the right leg seemed to exude to an alarming extent. At every dressing, the pus had soaked through the gauze, cotton and bandages at the four drain openings.

"Five days later," says Dr. Duncan, "I saw that the patient was becoming still worse. I decided that it was time to cease administering the known and accepted methods of treatment that were not doing my patient any good. So, in the same manner as I treated the dog and the two dying young mothers after they were apparently hopeless cases, I instructed my assistants to take one drop of the patient's own pus from the wound, and to place it in two ounces of distilled water and shake it thoroughly. Then this pus solution was given to the patient in small doses three times a day for three days.

"There was marked improvement every day. Five days later, there was only a half ounce of pus on all four drains together. Seven days following the administering of the first pus solution, there was no longer any discharge from the wound."

Identification of the microörganisms in this case was made by a pathologist, and they were found to be streptococci long chain and staphylococcus alba. The leucocyte count was 18,000. But, nevertheless, the patient made a quick recovery. Dr. Duncan had saved another life.

Since all infectious diseases have a discharge of pus or mucus, he set out to discover if this principle was applicable to all such diseases. He discovered that in every disease for which he tried it, it was applicable with remarkable results and success. In further experimentation, Dr. Duncan discovered that the patient's recovery was instantaneous when the filtrate of the pus solution was administered with a needle.

Dr. Duncan contends that every infected wound has the remedy within the wound itself, placed there by nature, to cause the wound to heal quickly. Thus, he bases his theory on the fundamental law of self-preservation by nature.

"Infectious diseases," he says, "are strictly human diseases. Dogs don't have them!" And getting back to the dog, his principal example in discussing his theory, he states some facts and asked some questions of his listener. "A million and a half soldiers died of non-fatal wounds received on the battlefield in the World War!

Would a million and a half non-fatally wounded dogs have died where the wound was in reach of the tongue?" He states that about eight thousand mothers die at childbirth in the United States every year. Then he asks, "How many dogs die when giving birth to a litter of puppies?"

Official investigations are not unfamiliar to Dr. Duncan. The Homeopathic Medical Society of the County of New York, officially investigated his work for a whole year. At the conclusion of its exhaustive researches, the Society unanimously endorsed his theories.

The writer did a little "unofficial" investigating himself after several interviews with the doctor. I found that his patients are from all walks of life, and from the very wealthy to the very poor. There is the owner of a New York newspaper, a railroad executive of great prominence and there is a domestic servant and a Wall Street clerk. His fees, like those of most doctors, are based on "what the traffic will bear."

Dr. Duncan gave me a mimeographed list of hundreds of names of prominent figures in the medical profession who have endorsed his work. One of the endorsements was a statement by George Frederick Laidlaw, M. D., Surgical Pathologist at the New York Medical Center.

Dr. Laidlaw's words were so definitely positive in the praise of Dr. Duncan, and his methods, that I thought they needed verification before I would include them in this article.

So I called Dr. Laidlaw on the telephone.

"Did you ever endorse Dr. Charles Henry Duncan's method of treatment of infectious diseases?" I asked.

"I most certainly did. I endorsed it when he first came out with it."

"Does your endorsement still hold true?"

"It does."

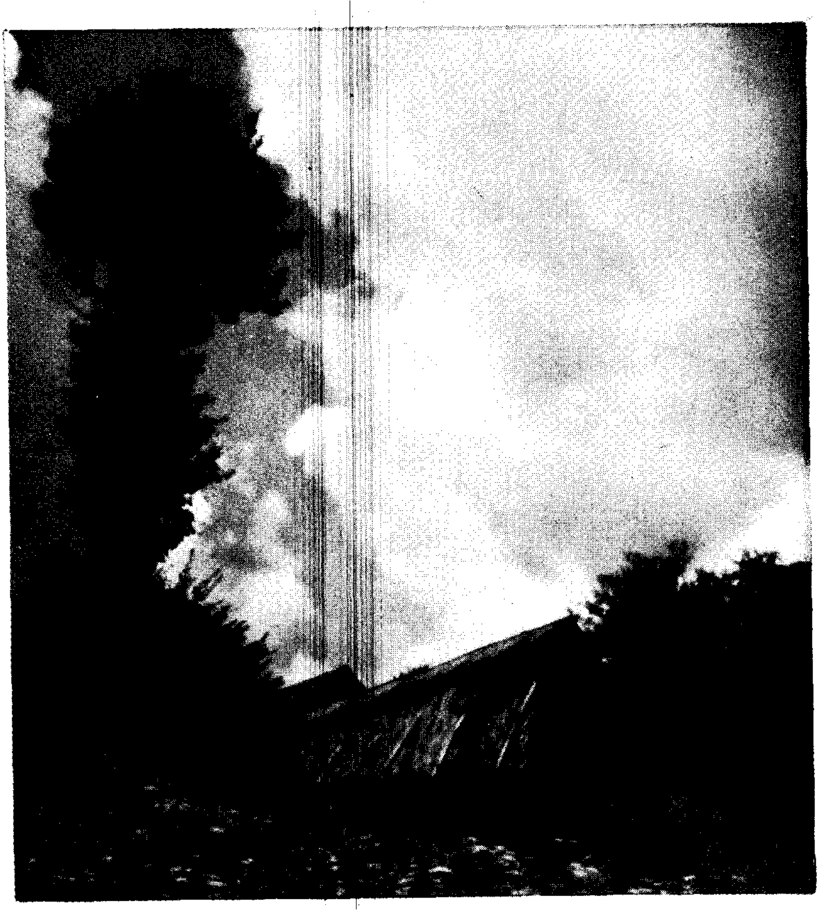
"Is this your statement, Dr. Laidlaw?—'While this treatment is new, it is not a wild experiment. It is the logical conclusion of the work of Koch, of Pasteur, and Wright with his vaccines. It is merely one step forward in the regular development of bacterial therapeutics. Dr. Duncan has solved a problem that has been germinating in medicine for over a thousand years.'—Did you say that?"

"Those are my words. I believe that his ideas are theoretically sound."

It seems that Dr. Laidlaw discovered Dr. Charles Henry Duncan long before I did. But nearly every discoverer of a great medical theory in the last several hundred years has undergone the same sort of criticism that Dr. Duncan has been forced to endure for the past twenty-five years. They have all given their lives in their fight for recognition. Pasteur was ridiculed and scoffed at in the last century. By syllogistic reasoning it is logical to believe that some of the scientists whose discoveries we condemn today, will be acclaimed tomorrow.

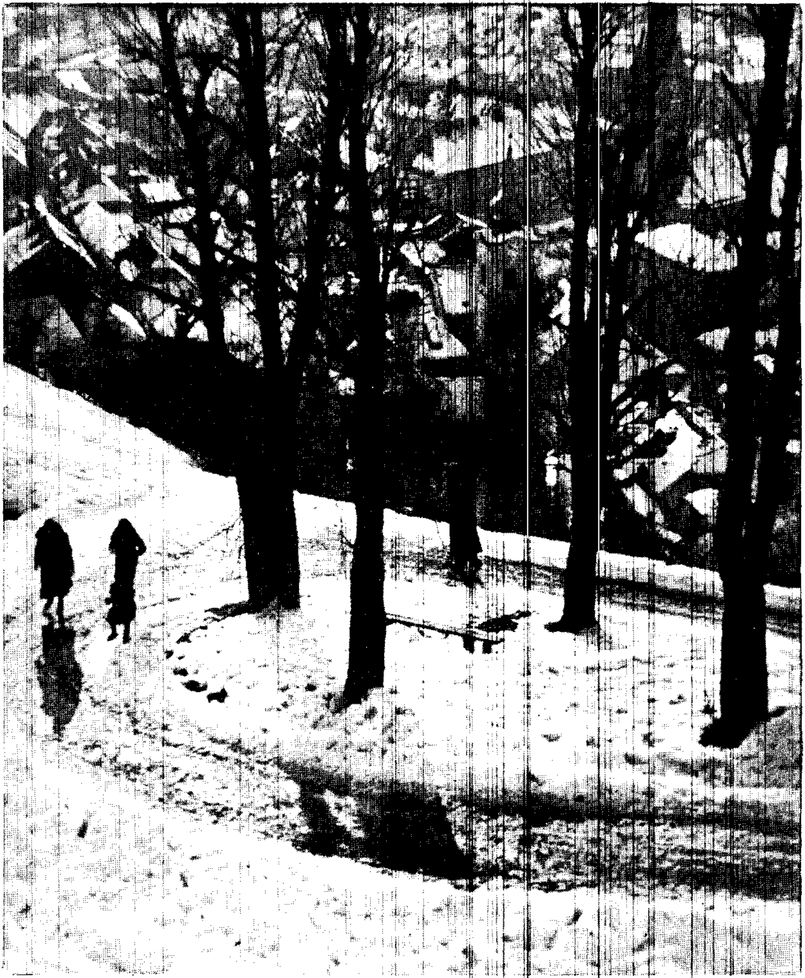
—Paul E. Ackerman

I WALTZ FOR THEE



ON THE HILLS OF THE HOMELAND

JANUARY, 1937



BY THE CASTLE ROAD IN WINTER . .

ON THE FIELD ROAD IN SPRING

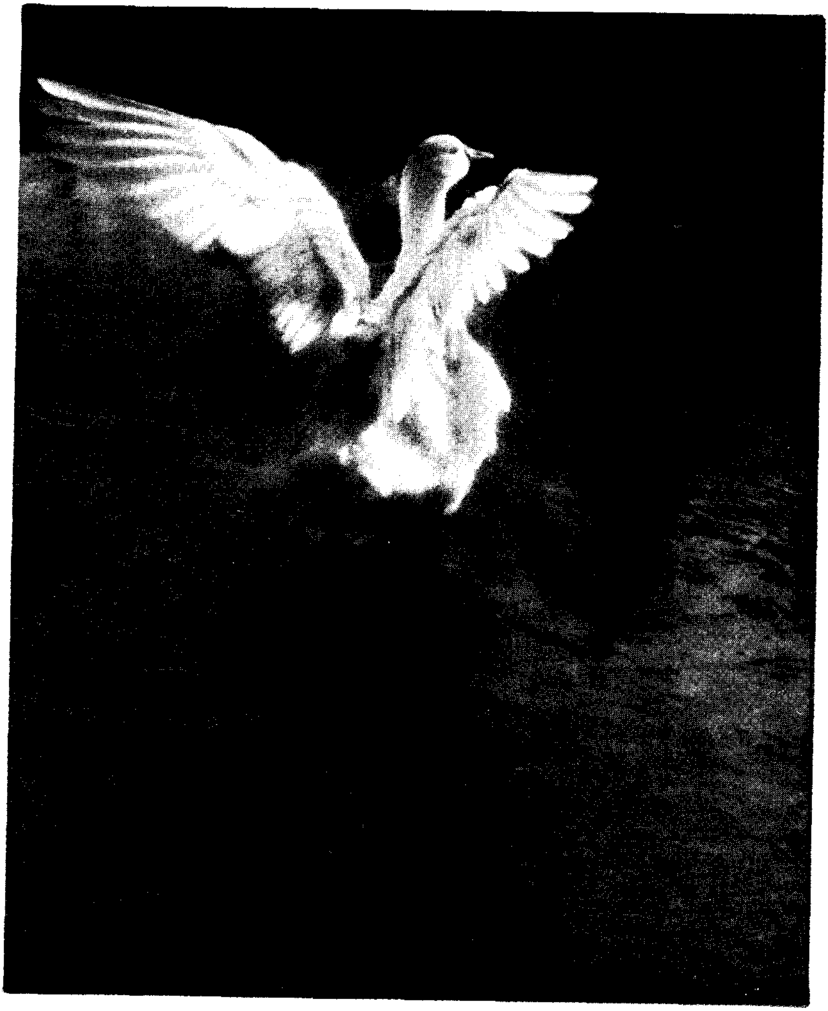
THERE IS WORK

THERE IS PLAY

THERE ARE DREAMS

[illegible]

[illegible]

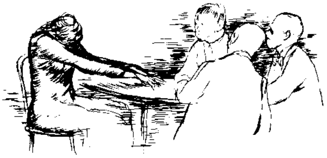


THERE IS BEAUTY . . .

. . . AND CONTENTMENT . . .

IS THIS SUPERNORMAL?

AN INVESTIGATOR OF THE PSYCHIC PHENOMENA IS BAFFLED BY THREE



During the course of an experience in psychical research which has led me, on the trail of the elusive medium, to such diverse places as the Austrian Alps and Rio de Janeiro, an island in the Oslo fjord and Cincinnati, I have on only three occasions seen physical phenomena which I was and remain unable to explain. These three experiences I will put before the reader, from whom I shall be interested to know whether he is better able than I am to find the normal key, if there is one, which will unlock these mysterious happenings.

In the Autumn of 1928 I was in Paris looking over the mediumistic situation; there I made the acquaintance of a Russian lady, Mme. Kahl-Toukholka, who was (and to a less degree still is) practising as a sort of superior fortune-teller and crystal-gazer. With this lady I carried out a number of apparently telepathic experiments, which were on the whole successful, but not to an astonishing degree. What followed was, however, sufficiently astonishing. For Mme. Kahl-Toukholka had in reserve a far more striking phenomenon for those she considered worthy of it. Happily I was one of the elect. In short Mme. Kahl-Toukholka claimed to be able to reproduce as markings on her skin any design which was telepathically transmitted to her! Now this kind of thing is easily faked and used to be practised by the early American spiritualistic mediums. One method is to draw the required figure with an invisible chemical on the skin, the warmth of which gradually brings it out. It is then only necessary to "force" a particular design on the sitter in the same way as a conjuror "forces" a card on the spectator although the latter thinks he has made a free choice. Conscious of this, I took the necessary precautions, though it is only fair to say that I had no reason to suspect Mme. Kahl-Toukholka of sharp practices. Still, in psychical research as elsewhere prevention is better than cure.

The infinity sign, which looks like a figure 8 lying on its side, was drawn on a piece of paper by my companion, M. René Warcollier. This piece of paper he did not show and kept in his hand. I then took hold of Mme.

Kahl-Toukholka's wrists, she asked on which arm I wanted the design to appear, and I chose the left arm. In a moment or two, there appeared on the skin of the inner side of the left forearm a large figure eight about five inches in length. The design was in pink or pale red and had the appearance of a subcutaneous suffusion of blood. Neither rubbing nor wetting affected it in the least. In a couple of minutes it gradually disappeared of its own accord. I then, in the same way, drew two interlaced triangles on a piece of paper, which remained in my hand and was seen by nobody. In a couple of seconds there appeared for a few moments the figure of a single triangle on the identical spot on which the *8* had been.

Now, I want to emphasize that throughout these experiments there had been no contact with the arm of any kind except that made by me to test the nature of the markings. This is important, for it may be argued that even though I flatter myself that my powers of observation in such matters are rather exceptionally good, still Mme. Kahl-Toukholka may somehow have managed to get a sight of the drawings made on the bits of papers. It must be remembered that even if this were the case, she could not possibly have conveyed the drawings to her arm. Even the most hardened sceptic will not claim, I hope, that the medium could, in my not uncritical presence, have chemically drawn a large figure on her arm in the moment or two that passed between the making of the drawing and my grasping of her wrists. No, only two explanations present themselves to me: (1) The medium previously prepared her arm and then caused the sitter, by telepathic suggestion, to make the required drawing; or (2) The whole process was supernormal, that is, carried out by means unknown to science. There are objections to (1), for instance, the appearing of two designs successively on the same spot. And in any case, telepathic suggestion is not a phenomenon accepted by science or even by critical psychical research; hence it is itself supernormal.

I turn now to a totally different phenomenon, but one equally simple and almost equally difficult to explain. From Paris we have to go to Rio de Janeiro, whither I traveled in the Summer of 1934 for the special purpose of having sittings with the Brazilian medium Carlos Mirabelli. More astounding things have been reported of Mirabelli than of any other medium, not even excepting D. D. Home. This does not mean much, for the volume and the loudness of such claims have to be divided by their source, a novel kind of arithmetic but a very necessary one. So I did not expect to see Mirabelli produce full-size and solid phantoms, as alleged; nor did I expect to have him telephone me from San Paulo immediately after leaving the room in Rio de

Janeiro, as alleged; but I *did* hope to see some of the lesser marvels, however produced. And see them I did; unfortunately, with one solitary exception, they were clearly fraudulent, in my opinion at least. It is the one exception that I want to describe.

Mirabelli produced an ordinary medium-sized blackboard and also pointed to an accumulation of empty wine bottles standing on a table. He asked me to take one of these bottles and to balance the blackboard on it. It was quite difficult to find the center of equilibrium of the blackboard, which was somewhat warped. Consequently it would not lie flat even on a table, let alone precariously balanced on the mouth of a bottle. However, I managed it in time. Mirabelli then had the "sitters" stand, with himself, around the table on which stood the bottle and the blackboard. Then, all this in brilliant light, we had to stretch out our hands about six inches above the edges of the blackboard. In this position we then had to circle round and round the table, all the time keeping the palms of our hands over the edges of the board. Having grasped the instructions we started circling and had performed about half a turn around the table, when we saw that the blackboard was beginning to revolve as if in pursuit of us. When I remembered the difficulty I had had in balancing it on the neck of the bottle this somewhat surprised me; but my surprise was materially increased when the blackboard in this way performed over two complete revolutions on its own axis, the bottle remaining stationary. Only then did the board heel over and fall. On two occasions when this happened I remained outside the circle and filmed the scene; but the light, brilliant to our eyes, was not good enough for cinematographic purposes, and the resulting pictures, though they very clearly show the movement, are very dull.

How is this to be explained? Were there steel filings in the wood of the blackboard, and did Mirabelli have a magnet in his hand? I can only say that I examined both the blackboard, to which I had free and prolonged access, with every care, and that I watched Mirabelli with equal care. I do not think that this explanation will hold water. Did Mirabelli manage somehow to attach a black thread to the board and so pull it round with him? How could this be done in bright light, under the eyes of half a dozen people, and with a board so prone to falling over even when left to itself? These are the only two normal explanations I can think of which are within measurable distance of sanity. Let nobody invoke mass-hypnosis, in any case a nonexistent phenomenon, unless he is prepared to admit a hypnotized camera!

I now turn to a series of events which occurred in sittings with the young Austrian medium Rudi Schneider in September, 1933, at Weyer, in Upper Austria, in a little building put up in the grounds of Herr Schickl's villa. It is a perfectly plain structure, clearly making impossible anything in the nature of trapdoors or hidden entrances. Those who took part in the sittings were in part members of the Society for Psychical Research, in part persons who may reasonably be described as friends of the medium. The reader must make all due allowances on this account, though actually the conditions of the sittings were such that the sitters could not possibly have played any part in the production of the phenomena that were witnessed.

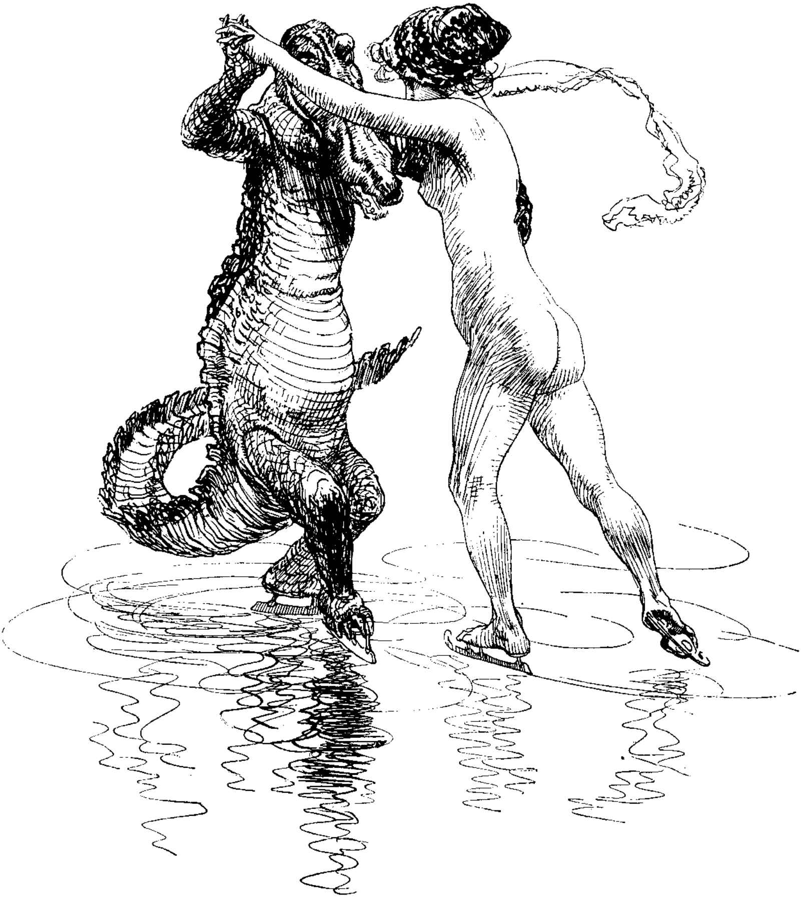
In a corner of the room was hung a pair of black curtains. In front of these curtains stood a light table, and on the table stood a vase containing a very tall artificial flower. Immediately over the vase and the flower hung an electric light shaded by red paper. In a semi-circle beyond the table were placed, from wall to wall, the chairs of the sitters. At one extremity, that is, against one of the walls, and facing the last chair, was placed that of the medium. Thus all the sitters faced the table and beyond it the curtains, while the medium faced the sitters and had his back to the curtains. The illumination produced by the shaded lamp was such that a watch could be read by its light; and it spread so far beyond the table that the side of the medium and the legs of all the sitters could be clearly seen. The curtains were not directly visible, but luminous buttons and strips were attached to them, so that the least movements of either one of the curtains at once became visible. Two other items in the control of the medium must be mentioned. First, the sitter whom the medium immediately faced held Rudi's hands tightly in his own hands and placed his feet on the medium's feet. Second is the most potent form of control that could possibly be imagined, the medium's breathing. It is well-known that the normal rate of breathing is 12-14 cycles a minute. Rudi Schneider, however, when he is giving a sitting falls into a sort of trance, and in this trance his breathing rapidly accelerates up to a maximum of about 350 cycles per minute, seldom falling below 100 cycles of inhalations and exhalations per minute. Let no one question this fact, however incredible to the physiologist, for the details of this breathing have been minutely and authoritatively recorded by the appropriate apparatus. Now if the reader will try for a moment or two to breathe at this rate he will find, among other things less pleasant, that he makes a great deal of noise. This noise is the best safeguard during Rudi's sittings, for so long as it goes on (and I have known it to go on, with short intervals, for five hours) there can be not the slightest doubt of the medium's whereabouts.

So much for the preliminaries, which should be kept in mind when reading what follows. During the

Weyer sittings I am describing various minor things happened, and then the trance-voice of the medium, speaking in short gasps, very difficult to understand, fitted in, as it were, with the locomotive-like gasps of the breathing, asked me to take my handkerchief and lay it across my hand, then holding out that hand under the light. This I did, my hand being thus in a clearly lit area where everything that happened was unmistakably observed by all those present. A few moments passed, and Rudi then gasped out an inquiry as to whether I would object to having my handkerchief washed. Needless to say I hastened to express my delight at the prospect. At once one of the curtains behind the table started to billow towards my hand. The movements were rather like those of the waves of an incoming tide. The curtain billowed forward, moved back a little, billowed a little further forward, back again, and so, until it finally touched my hand, a total forward movement of about two feet. As the curtain touched my hand I felt a sort of yielding solidity behind it; this thing clasped itself, through the curtain, around the handkerchief which was hanging from my hand, and slowly drew it away. As the curtain retired the whiteness of the handkerchief was seen to disappear behind it. A bowl of water stood behind the curtain and from this sounds of splashing were immediately heard. When the sitting ended water was found splashed over the floor and the handkerchief was seen lying in the corner, drenching wet and tied into a knot.

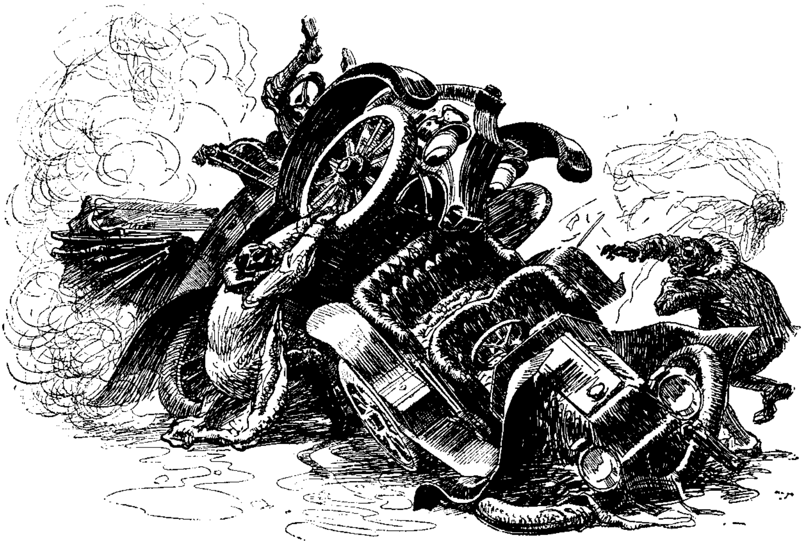
On another occasion a similar performance was gone through, except that I was asked to put the flower across my hand, from which it was taken in the same way, removed behind the curtain and there broken. How are these things to be explained? If there is a normal explanation I do not know it, even though a considerable experience has made me rather fertile in normal explanations of mediumistic phenomena. The things I have described were certainly not done by Rudi Schneider himself; equally certainly they were not done by any of the sitters; just as certainly there was no sort of apparatus in the room that did it, even if such apparatus could be devised; and it was in the highest degree unlikely that any outsider could have got in through a locked door, through the complete semi-circle of sitters, through the red light, through the curtain, and then back again through all these things, without being observed. Is any normal explanation possible?

These three episodes are all that I have retained from ten years' assiduous research into these paraphysical phenomena. The vast pyramid of fraud and self-deception built up on these phenomena is found to have so very slender a foundation. It is characteristic of the whole subject that so long a quest must end, as it began, with a query.—THEODORE BESTERMAN



HEINRICH KLEY

THE ICE WALTZ

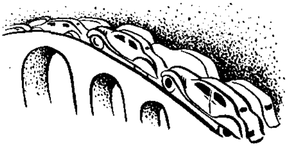


HEINRICH KLEY

SPEED DEMONS

STOP-AND-GO-CARTS

THIS MODERN CAR IS SO GOOD YOU WONDER WHY IT ISN'T MUCH BETTER



THE sleek and opulent appearance of the present-day automobile effectively masks from the layman the fact that, technically speaking, it is still many years behind the times. Moreover, there are certain definite trends in style and design which make the car of today considerably less safe to drive than its predecessor of a few years ago. Startling though these statements may appear, even a cursory analysis reveals ample scope for fundamental improvements, and several practices which make safe driving difficult. There are also minor additions, long overdue, which would seem indispensable to the owner-driver were he aware of their existence.

Minor engine improvements in recent years include the more extensive use of thermostatic control of engine temperature, automatic spark control, devices for improving starting from cold, better lubrication, better distribution of fuel to the cylinders, and others called by obscurely impressive names in the descriptive brochures.

Are engines really efficient, however? In spite of all the advertisements, it is to be doubted that the average driver gets more than 18 miles to his gallon of gasoline. Modern motors are rated at 30 horsepower and up, the power being provided mainly so that one can make a flashing getaway from one amber light to the next red one (a block distant), or travel at better than 90 miles per hour for less than one tenth of one percent of the time one owns the car.

A conventional European six-cylinder car rated at 12 horsepower will do its 60 miles per hour (and up) and under practically all conditions will give 25 miles to the (U. S.) gallon of gasoline. It seats four passengers in comfort, five with a sometimes attractive squeeze. To go to an extreme, consider the efficiency of the European baby car rated at about 8 horsepower, giving 33 miles or more to the (U. S.) gallon, and remember that "sport" models have been driven at speeds greater than 90 miles per hour on the track.

Without for one moment advocating that we should all drive baby cars, it does seem that there is ample room for improving the efficiency of today's high-powered engines.

Within recent years synchro-mesh transmissions have been almost universally adopted, enabling quiet gear changes to be made. But the real heart of the problem still remains—why have to shift gears at all? According to one national advertiser four out of every five miles in a car are "stop-and-go," and one can make as many as 30 gear shifts in 7 blocks of busy downtown driving. Several types of transmission have been proposed for simplifying driving, and a few of these have been, or are now commercially available. If memory serves there is one used in Sweden which reduces driving to steering and to operating a single pedal, while England has a "fluid-flywheel" which practically eliminates the use of the clutch pedal.

Work would probably be necessary to develop a gearless transmission ideally suited to American conditions and preferences, but would it not be justified by the inevitable public welcome and enthusiastic acceptance?

Modern automobile bodies are outwardly more attractively styled, and are more rigid than their predecessors.

Generally speaking, however, it is difficult to get in or out of a current model car without the expenditure of considerable energy, and of profanity when the low roof contacts your head.

It has been aptly remarked that a new type of American should be developed to ride the new cars in comfort.

Windshields and windows appear to grow smaller each year, and visibility decreases accordingly. The driver sees less of the road and fewer traffic lights, and he might almost as well reverse blindfolded: his passengers miss about ninety per cent of the scenery. Extrapolation would suggest that, within a few years, there will be neither windshield nor windows, contact with the outside world being established exclusively by periscope, radio, and collision.

Ventilation is suspect—if stale air is drawn *out* of the car through the windows, it must be replaced by air entering around the doors and through the floor, bringing in road-dust, deadly exhaust fumes, etc.; most luggage compartments, though undoubtedly useful, appear rather as slightly incongruous afterthoughts than as integral parts of the body; running boards are rounded, frequently become hazardous, and are in any event a waste of space—why not eliminate them, widen the body, and step right into the car? So standardized have colors and body styling become that, with one or two notable exceptions, it is impossible to tell one make of car from another.

Furthermore, the ideal body type is not yet available at a reasonable price. Few will dispute the advantages of an open car at certain seasons of the year, or the necessity for a closed car at other times. It is possible to buy convertible body types which are draughty and soon develop irritating rattles and squeaks. The "Sunshine" roof, popular and well proven in Europe, is yet practically unknown here. The device is simple and trouble-free: the front part of the roof of an otherwise conventional closed car can be slid back over the rear part in a few seconds by the driver, without interfering with his driving duties. In good weather this gives almost the visibility and charm of an open car, with perhaps added comfort. In bad or cold weather a completely closed body is available, as also at all times when articles have to be locked inside. Even after long use this type of roof remains entirely leak-proof and silent, which cannot be said of the majority of existing convertible body types.

With so much attention now being given to safety, it is surprising to find that no manufacturer has introduced an efficient method of signaling right- and left-hand turns. A device is in use abroad, consisting of two lightly constructed arms hinged (and normally hidden) in the bodywork, one on each side of the car. At the touch of a switch the appropriate arm is brought into action to indicate the turn. As they jump to the horizontal a light is switched on inside, making them visible at night. One type is automatically returned to the off position as the steering wheel is straightened out after a turn. It is hardly necessary to point out how useful these are on cold nights and during bad weather, since it is no longer necessary to drive with a window open, to keep opening and shutting a window when signals must be made, or (more often) to take a chance and not signal at all.

Modern steering is really pernicious. It is necessary to turn the steering wheel through a great many degrees in order to turn the front wheels through one degree. Although this may give delightful and effortless steering on a perfectly straight road, the wheel must be turned rapidly sometimes through several complete revolutions, when negotiating a bend. Straightening out after the turn is also bad, since the only way it can be done quickly is to let go of the wheel and allow it to fly back to the straight-ahead position.

The so-called "streamlining" in general use is not streamlining at all: it consists mainly of a few strips of shiny metal placed some distance in front of the radiator, together with the smoothing of a few formerly sharp corners on fenders, body, etc. One manufacturer courageously put out a model which showed signs of an honest attempt at streamlining, but subsequently added more conventional touches as a concession to a startled public.

As far back as 1913, automobile body design was criticized and the streamline form was predicted, but as no general attempt has been made to popularize this scientific form, the public remains vaguely hostile or apathetic.

Among the advantages claimed for streamlining are: more efficient utilization of available space; greatly improved riding comfort for rear-seat passengers, since all ride midway between the axles; engine at the rear driving the rear wheels, exhaust fumes swept away from the passengers; excellent visibility for driver and passengers; greatly reduced air resistance and reduced gasoline consumption while touring. It may be doubted whether the latter advantage is yet appreciable—we may have to wait for the express highways of the future before full advantage can be taken of the streamline form. The railroads, at any rate, are making increasing use of streamlined trains, which is very significant.

It is interesting to compare the horsepower expended in overcoming air resistance alone on certain conventional body types, at a speed of 60 miles an hour:

1922 Sedan	27 horsepower
1928 Sedan	26 horsepower
1933 Sedan	18 horsepower
Streamlined Sedan	7 horsepower

At 48 miles an hour the air resistance is one half what it is at 60, while at 76 miles an hour it is doubled. It must be noted, however, that these figures are based on wind-tunnel tests in which the model faces directly into the wind. So far as the writer is aware no predictions have been made concerning the effect of cross winds, which would certainly be encountered in practice.

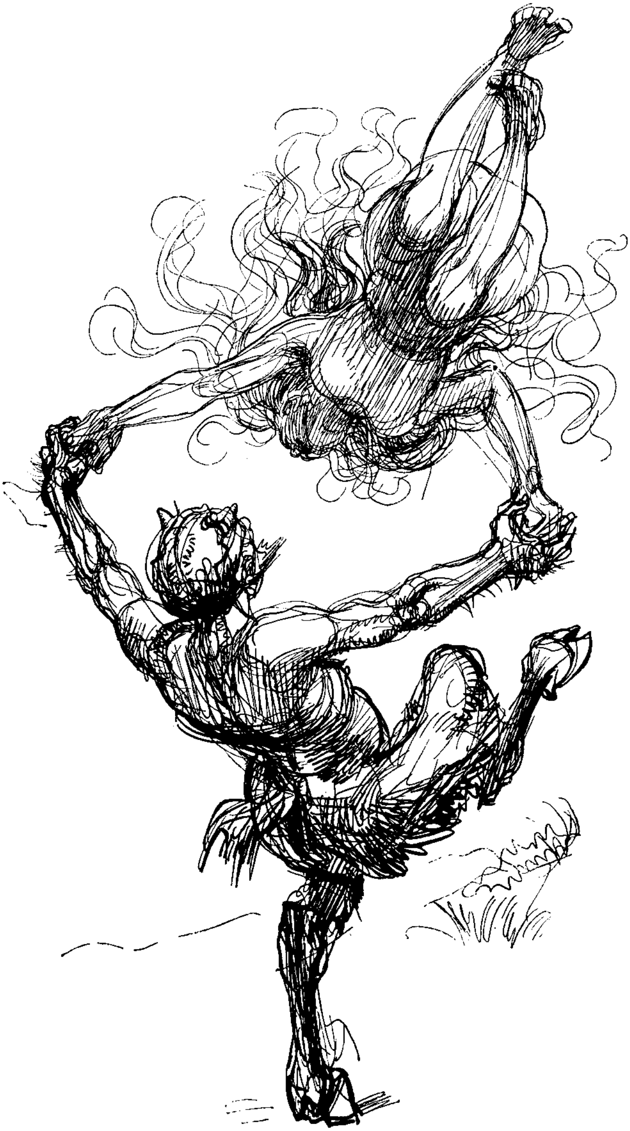
The problem of headlight glare has recently been solved, but the solution has not yet been put into practice. Certain specially prepared films possess the property of "polarizing" a beam of light, so that only those "vibrations" in a certain plane are allowed to pass, the rest being almost completely absorbed. A headlight viewed through one of these films appears unchanged, but, if a second piece of the film is placed over the first in the correct manner, the headlight practically "goes out." Clearly, therefore, all headlights can be fitted with one "polarizing film," all windshields with a similar film oriented to cut out light from opposing headlights.

Objects illuminated by one's own headlights can be distinctly seen through one's own windshield, but the opposing headlights are practically extinguished. The general application of this principle would add greatly to the safety and comfort of night driving, although several years must necessarily elapse before all headlights and windshields can be so treated.

The above are a few of the outstanding, overdue improvements in automobile design—the "unfinished business" of the car designer.

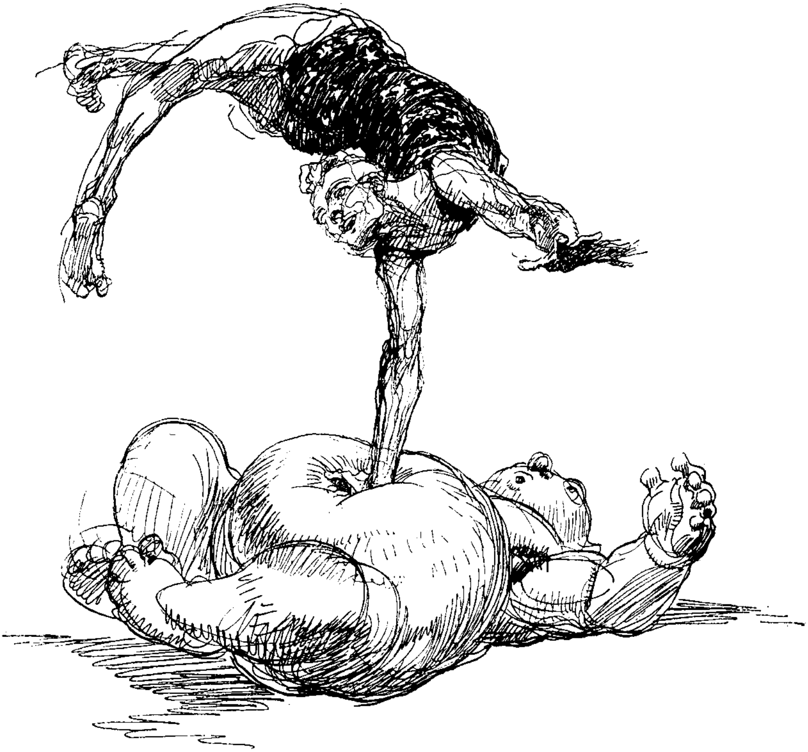
—Sydney Steele

Mr. Steele was born in England and educated at Cambridge; an engineer, he is now engaged with chemicals but has long worked with automobile engines, including much work with Diesels.



HEINRICH KLEY

DANCE OF YOUTH



HEINRICH KLEY

DANCE OF AGE

I'VE GOT A GREAT IDEA!

SO HAS THE MAN NEXT DOOR AND SO HAVE YOU AND SO ON AND ON

HENRY FORD, or somebody else, said that success, or something else, was one-tenth inspiration and nine-tenths perspiration. That sounds like about the right proportion to me. And no doubt accounts for Mr. Ford's position on the ladder. For mine too, and probably yours. I've never had my personal chemistry analyzed, but I do know that I inspire easily, and sweat reluctantly.

That's an unhappy formula for most of us. If it were only the other way round, with inspiration carrying the heavy load and hard work a negligible factor, we could make something of ourselves. It seems a pity to me that you have to build the better mousetrap; it ought to be enough just to think of it. There's far too much emphasis on accomplishment, too much using "What did he ever do?" as our yardstick.

By that measuring system, I'm only about knee-high. But if inspirations, ideas, schemes and plans count for anything, I become a person of some stature. I've had some magnificent inspirations, and have even invented a few things. None of them ever got into production; in fact none of them reached the patent office. They were just ideas from which I was going to make millions if I could have ever gotten around to them. It was the perspiration ingredient that stopped me. Of course, I don't object to rewarding hard workers with fat salaries and big offices. Hard work takes up a lot of valuable time and it's hard work. But there ought to be some outlet, some form of recognition for brilliant ideas besides telling them to your wife, your best friend, or a man you meet on a long train ride.

For instance, I once had an idea for a short story about a ball player who could never hit anything but foul balls into the grandstand. Every time this fellow's team was behind, the manager would send him in as a pinch hitter. He'd knock sixty or seventy foul balls into the stands until the umpire called the game on account of darkness.

I could never quite work out the solution, or dénouement, as I think they call it, but I think I was going to wind it up by having the rival manager send all his players but the pitcher and catcher into the grandstand.

Now you can't, or at least I can't, make a story out of that—but it's a good idea for one. If there were only some place where I could have it recorded as "Idea for a Short Story No. 36,487. By John Cushman Fistere." I'd be satisfied. It isn't money we thinkers want, it's credit.

Most of my colossal inspirations strike me when I'm not doing very well at what I'm supposed to be doing. Give me a dull Monday morning when nothing seems to be clicking, and before lunch I will have had at least one flash that would build me a mansion on Easy Street. It was one such morning, when I was dividing my time evenly between looking out the window and resting my chin on my hands, that I invented a piano to make composing easy. My device was a sort of typewriter attachment underneath the keys which recorded on a piece of paper all the notes struck during a composer's improvisations.

And the wonder of it is that I can't even play the piano.

From what I can learn most other people inspire best when life looks blackest. I have a friend who owns a department store in a small Southern town, or rather who did own it until his creditors lost their optimism. He told me that every time he balanced his books the genius in him would assert itself, and out of the red ink would rise a whale of an idea not only to put the store back on its feet, but to build an addition as well. Unfortunately, he had to spend so much time stalling off his creditors that he never had a chance to put any of his plans in operation.

Nor will I ever forget the day after my old company was forced into receivership. The president, who not only lost his nice $35,000 a year job but about a quarter of a million dollars as well, was naturally wandering around the streets debating whether to make it:

PUBLISHER ENDS LIFE IN
TWELVE-STORY PLUNGE

or the more dramatic—

PUBLISHER SHOOTS SELF IN
MIDTOWN HOTEL ROOM

Having screwed his courage to the sticking point by a tour of all the bars within one block of Grand Central Station, he got to thinking of the high price of club soda. Why not, he thought, invent a wonderful new pill which when dropped in a glass of ordinary water would immediately carbonate it. All thoughts of high diving and gun play disappeared as he began spending his inevitable millions. Not being a chemist or even knowing a chemist, he was considerably handicapped in working out the details. And before he could do anything with the idea, he got a job selling advertising. I remember that he even had it figured out that he would sell the pills for ten cents a bottle; I think he had some difficulty with the name, however. "Fizzball" was the best he could do.

And what, except the fact that it saved his life, did my ex-boss ever get out of it—nothing but the recognition of his genius by his friends. If there were only some means of according him public approval, he could go on selling advertising and be perfectly happy. As it is, Fizzball haunts him. Some day, he keeps saying to himself, he'll do something with it.

Consider the usual course of a man with a great idea. First it strikes him. (If you can recall your own inspirations, you'll agree, I think, that none of them came from intentional deliberation. They struck you, probably while waiting for your wife, or a train, or while falling asleep.) Then follows for our inspired man a period known as the inward glow era. It is unlike anything else in the world except possibly exclusive knowledge of a buried trunkful of gold nuggets. For days he goes about town smiling to himself, feeling happy about something, he doesn't know what, until it occurs to him again that he is the sole possessor of a great idea.

If he is like most of us, he will not scratch even a bare outline of his scheme on paper. That somehow spoils it. He just mulls it over in his mind, trying to think of all the angles, trying to discover possible flaws, looking for what are currently referred to as "bugs" in it. Each time there seems to be more money in it, more possibilities for exploitation. A week or so goes by before he becomes determined to do something about it—take it to a manufacturer, a publisher, an advertising agency. He's a little suspicious, of course, because he knows what pirates business men are. He says no word of it to anyone but his wife, who reacts satisfactorily except that she suggests a few improvements that never seem to be consequential.

The determination modified by the suspicion finally results in something like this to a manufacturer:

"Dear Sir:

> I have conceived an idea which I believe will be profitable both to your company and to me. The nature of the plan (invention, scheme or whatever it may be) is such that *I should not like to disclose it without some form of protective guarantee.* If you will agree to pay me $10,000 ($100,000 or $1,000,000) if you adopt the plan, I shall be glad to supply the details.
>
> Yours very truly,"

After reading it over to his wife, (and correcting it) he makes a special trip to mail the letter, and then waits. Although no answer could have been expected the next day, he pores over the mail in a fever. He does the same the next day, and the next, and the next. Maybe the president is away, maybe he had the wrong address, maybe any one of a hundred things—except the probable truth, that the letter has been tossed into the waste basket.

After one rebuff like that, the idea is gradually forgotten and is thought of again only when conversation winds around to an allied subject. Then, although he may not have thought of the thing in months, he says after obtaining a pledge of secrecy, "I'm working on a scheme now which, just between you and me . . . etc."

As the months roll into years, he becomes more promiscuous about telling people. Finally he gets to a point where he is willing to give the idea away, or sell if for five dollars, just so something will be done with it. But nothing ever is. Occasionally, years later, there is some satisfaction in discovering that someone else had thought of the same thing and had put it on the market. It's not exactly the same, but it's invariably close enough so that he can have the pleasure of calling the fellow a crook.

For instance, I'm sure there is one man in this country who must be getting a lot of self-satisfaction these days. It's a fellow who fifteen or twenty years ago in New York rented a store on Broadway between Forty-eighth and Forty-ninth Streets to promote the sale of stock in a company to harness the tides to create power. On the wall he had a huge topographic map showing just how the scheme worked, and in the window a small model of a power plant. It was a fascinating thing, and I often have wondered what happened to him and it. Then came the New Deal with Passamoquoddy.

With his topographic map and his model, that man got more out of his idea than most of us do with ours. Inventors, of course, have a patent office where they can register their devices, and there are scientific magazines which publish all kinds of revolutionary contraptions. Some things, however, like a good title for a book, an advertising slogan, or a never-failing way to get ice cubes out of their trays, can't be invented. All you can do is think of them. Besides, for every professional inventor who takes the trouble to get out a patent there are a hundred of us amateur wizards who couldn't draw our schemes, or to whom fussing with a lawyer and going through a lot of red tape seems like a lot of hard work. There ought to be some place where, when you had an inspiration, you could sit down and simply write a letter to the man in charge saying, "I had an idea last night. . . ." Back would come a certificate crediting you with having thought of it.

Now that I mull it over, I've got an even better idea. I think I'll start a magazine called *Schemes*, with nothing in it but schemes, plans, inventions—all kinds of ideas that can't seem to be used anywhere else. We would have captions for cartoons that nobody will ever draw, anecdotes that would make good short stories if the thinkers could only write, "perfect ideas for plays," lives of "people that would make good novels," advertising slogans that agencies are too smug to accept, descriptions of novelties about which it is invariably said, "I'll bet I could sell a lot of those," revolutionary ways of making money, sure-fire schemes to end war, and pension plans like Dr. Townsend's.

I'd have no trouble getting material. Just in the past week, here are some of the brilliant ideas I've heard about:

A bridge table with chairs that fold up under the table.

Cellophane wrappers for cigarettes with the printing on the cellophane, thus eliminating the paper and tinfoil.

A life of Magda Lupescu, King Carol's playmate.

A five-cent soda fountain drink that takes away liquor, tobacco and onion breath.

I can also see the possibilities of a great new company, Schemes, Inc., where I would employ practical fellows to work out the annoying details of anything, the 90 per cent perspiration people.

Think how such a plan would appeal to people in small towns, where mute, inglorious Miltons, and hog-tied Marconis thrive on every street. They live for the day when they're going to take their idea up to Memphis, Chicago, New York, or wherever they believe the center of the creative or the industrial world to be.

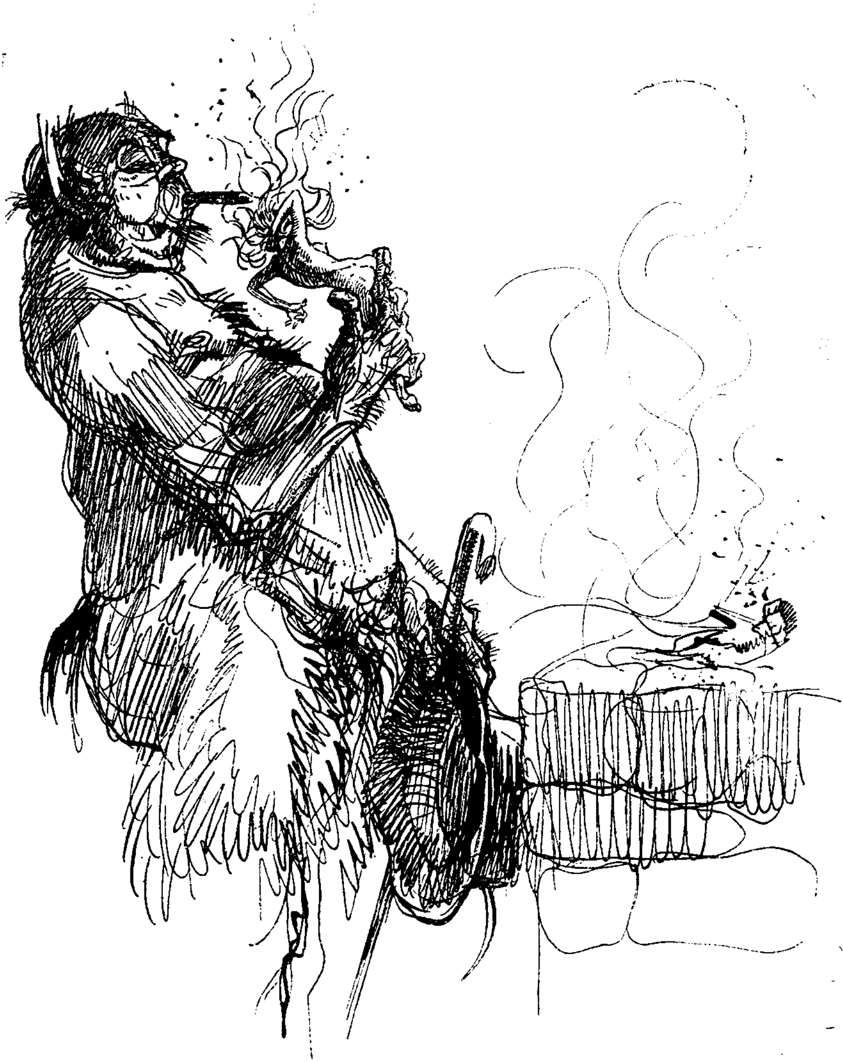
Think how such a plan would appeal to husbands whose wives are constantly suggesting schemes for them to work out. I'm sure I could get a stock subscription for my magazine and my company from an architect friend of mine just to provide an outlet for his wife's inspirations, and some relief for himself. Scarcely a dinner goes by at their house but that she has a wonderful new plan for a house, or a new piece of furniture. I can hear her now as she concludes her explanation, "Why wouldn't that work?" My friend's answer is always loyal, "It certainly would, dear." and then she says, "Well, why don't you do something with it?"

Particularly discomfiting to him is the day when she waits, clipping in hand, for him to come home. "Look at that!" she demands. "Just the same thing I was urging you to do something with last year. I don't know why I waste my time telling you ideas if you're not going to do something with them."

Think what a boon it would be to the mental health of the country by reducing the number of crackpots, who I understand get that way from frustration. When their pots had just begun to crack they used to think of ideas that would work. Then when they learned they could do nothing with them anyhow, they began to take in more territory — plans to save the world from economic ruin, plans to do away with divorce, disease, war.

Well, all I wish is that I had the time to work on my magazine *Schemes* and to get together the capital for Schemes, Inc. I'm sure there's a fortune in it.

—John Cushman Fistere



HEINRICH KLEY

THE OLD ROUÉ

THE ISLE OF KEEP-OUT

NOBODY SMOKES BUT THE SUPERINTENDENT AND HE'S THE ONLY WHITE MAN THERE

If you find it impossible to believe that Niihau can exist under the American flag, you can look it up on any sizable map of the Hawaiian group—a chunky island, say ten miles by four, lying west of Kauai, which is in turn westernmost of the larger islands. Its population consists of one white man, a couple of Japanese and a couple of hundred pure-bred Hawaiians, probably the largest compact group of them surviving. It is exclusively the property of a white family who also own much land on Kauai and are fairly sizable frogs in the Hawaiian puddle. They have owned it almost a hundred years, ever since, as immigrants from New Zealand, they bought it from the King of Hawaii for $10,000 in gold—a fair price in those days—and stocked it with cattle and sheep. But all that leaves out the point. Niihau shares with Alcatraz prison the distinction of being permanently and absolutely inaccessible to curiosity. You can't land there without permission from the Family and neither drag nor nerve will prevail on the Family to grant you permission. It is a private feudal principality complete with vassals, seneschal and manor-house, a jealously guarded world to itself.

Journalists visiting Hawaii, being first cousins of Bluebeard's wife by nature, sometimes work themselves into fruitless sweats trying to visit the place. They get no farther than a revenuer asking an Ozark mountaineer for permission to visit his grandpappy's still. The Family make exceptions only in cases where refusal would mean secession from the Territory of Hawaii—for the territorial governor, for instance, and the school- and health-inspectors of Kauai County. The son of the elderly Scotch superintendent, the only white man resident on Niihau, is allowed to visit his father once a year. But even he has to apply for special permission each time. The Family say that they prohibit visitors because they want to keep their faithful Hawaiians uncorrupted. But there is probably more than that to it. The more you hear of the Family, the better you gather that they are just not clubbily inclined.

It would do you little good to arrange to get shipwrecked on Niihau.

An inquisitive salesman once prevailed on the captain of an inter-island freighter to land him on the beach and was sorry afterwards. They put a sentinel over him, you hear, with orders to keep him in a small area near the beach until the freighter's boat returned for him. That was before breakfast. A gale blew up and piled such spectacular breakers on the beach that the boat could not come to fetch him till night-fall. In the meantime he had sat on a fence all day in a semi-tropical sun with no more nourishment than he could derive from the odors of breakfast, dinner and supper wafting over from a nearby house.

There probably isn't much to see anyway. Outsiders who visit Niihau on official business say it looks as if a piece of Arizona had got lost in the Pacific Ocean—a long waterless slope from the top of the high eastern cliffs down to the western beach, scantily decorated with cactus and scrubby algaroba bushes. Hawaiian cattle get along fine on cactus and algaroba pods if nothing better offers. Necessarily that description is second hand. All the writer knows of the place at first hand is its cigar-shaped silhouette on the western horizon fifteen miles away, close enough so that sometimes you can see a white thread of surf at the base of the black cliffs.

The Hawaiian vassals look after the cattle and sheep for the family—Hawaiians make first-rate cowhands, by the way—live in houses supplied by the Family, buy food from the Family with wages paid by the Family, fish only with permission from the Family, and never leave the Island to speak of because, if they leave without permission, the Family will never let them come back. They are required to wear pants and shirts or Mother Hubbards, according to sex, and are forbidden to drink and smoke. The superintendent alone is allowed his pipe. The local school goes only through the fourth grade, far enough to enable them to read the words of hymns—old dissenting hymns translated into Hawaiian—which are sung in the little chapel. Such unnatural means to grace as organs and pianos are forbidden in chapel. They say their unaccompanied singing is something to hear.

The minister is a local-born Hawaiian who is also schoolmaster, registrar of births and deaths and clerk of marriage licenses. When he was young the Family sent him to Honolulu for a couple of years of normal-school training. Church, school and all local business are conducted in Hawaiian. Niihau children of twelve and thirteen are often unable to speak a word of English. But their Christian names are of English origin, relics of the early nineteenth century plus much Bible-reading. Lydia, Lily and Rachel for the girls, Malachi, David and Samuel for the boys, tacked on to polysyllabic Hawaiian surnames bristling with k's and gurgling with l's and n's.

The presence of this forbidden kingdom only fifteen miles from the twentieth century has naturally produced a rich crop of gossip. Every white resident of Kauai has a pet story about Niihau and the Family. For instance, that once, when a Niihau boy who had kicked over the traces and gone to get a job in Honolulu sent back a phonograph to amuse his old father, the Family refused to allow so diabolically modern and corrupting a device to be landed. It is certainly true that Niihau knows nothing of moving-pictures and that it lacks either radio or telephone for communication with the Family's ancestral headquarters on Kauai. In emergencies the superintendent lights a beacon fire on the landward point and the Family send over a boat to investigate. Otherwise communication consists of a Japanese with a small sampan who makes a weekly trip for supplies. Since gasoline is taboo along with movies, alcohol and sightseers, the sampan is Diesel-motored.

Other gossip says that, when the Federal government installed a lighthouse on a rock north of Niihau, its revolving lamp had to be exchanged for a fixed flash because the sweeping beam disturbed the sleep of the head of the Family when resident in his kingdom. That, if a military plane flies over Niihau, the Family protest strenuously to the authorities because the noise of its motors disturbs the ewes in lambing-time. That, when an army officer was assigned to inspect the strategic potentialities of Niihau and asked the Family for a courtesy permission to visit the place, he was told that the Family was "not interested" in being inspected at all, by the United States Army or anybody else.

The Family, having been British subjects up to the present rising generation, have apparently never quite comprehended that, since the annexation of 1898, Niihau is as much part of the United States as the District of Columbia. Even the Niihau cattle are a roan English breed.

Some while ago, they say, the U. S. Geodetic Survey landed on Niihau without warning at night and built a fire to take a sight by. The fire immediately fetched members of the Family down to the little port opposite Niihau raking the waterfront for a skipper and a boat to ferry them across in the dark.

There are said to have been considerable ructions when they found that the supposed emergency-beacon was only Uncle Sam making himself a nuisance again.

The isolation of the place is phenomenal. When the old superintendent left Niihau on a visit a few years ago, his first step off the island in thirty years, he saw street-cars for the first time in his life and asked to be taken out to a landing-field near Honolulu so he could see what an aeroplane looked like close up. He might as well have been living in

Lhasa or Easter Island, instead of within a hundred miles of so thoroughly modernized a city as Honolulu. His Hawaiian fellow-prisoners, even with very special permission which is seldom granted, can wander no farther afield than Kauai. Their only other chance to leave Niihau is a trip to a Kauai hospital for an emergency operation.

The superintendent does local doctoring with a kit of iodine, splints and bandages. Hawaiian midwives deliver the babies and turn in a very respectable maternal- and infant-mortality record.

Recreation consists of cricket and volley-ball, introduced by the Family, surf-riding—the long ocean beach of Niihau is said to be even finer than Waikiki for surfing—and shark-hunting in the old style, the hunters plunging into the surf with knives tucked in their loin-cloths.

Being Hawaiians the vassals all have votes and use them in significant unanimity. Election returns from Niihau, they say, always consist of solid blocks of sixty-odd votes for the candidates of the Family's party. Hawaiian plantation-managers in general are often very skillful at getting their employees to vote the right way, but none of them ever come close to the dramatic results on Niihau. It is true, however, that, at long intervals, one Niihau voter splits an opposition candidate into his ticket.

That may be a gesture toward keeping up appearances. It is entirely inconceivable that it should be rebellion.

The superintendent has enough beef and mutton butchered for the vassals' needs and the cows of the beef-herd furnish a milk-supply. Canned goods, potatoes, taro—the staple Hawaiian food-plant—come over in the sampan every week along with bottled water for the Family when they are living in the big house which is the capital of their kingdom. The vassals drink rainwater caught in big wooden cisterns. A few brackish wells along the beach supply water for watering the cattle and washing. During droughts the well-water is reserved for the cattle and the vassals wash as best they can in sea-water. Three Hawaiians care for the Family's bees which make a famous honey out of algaroba blossoms.

The vassals are allowed to manufacture and export fancy hat-bands made of local shells—also out of peacock feathers.

The notion of peacocks stalking about this barren landscape is just as cockeyed as the rest of it. There are numbers of peacocks, pheasants and ptarmigan, imported by the Family who are great bird-lovers and very severe on anybody who pots one. No medieval barony would be complete without game-preserving.

Every year the head of the Family spends several months in his kingdom. He arrives on the inter-island freighter—government inspectors put up with the inevitable seasickness of the sampan. The steamer's boat is not trusted to land him through the surf. (There is no port on Niihau.) Instead a crew of his vassals pull him ashore in the whale-boat which used to be Niihau's only vessel. While the tenantry stand back respectfully, he is escorted to an old-fashioned surrey and driven to the mansion-house in state, with Hawaiian cowhands riding ahead to open gates. With him come his own cook and his own supplies and every evening he dines grandly in the big dining-room, full of the old carved furniture imported from England via New Zealand a hundred years ago.

Economically Niihau is only a paternalistic toy of the Family's and hardly pays its own way. Sugar land and strategic water-rights on Kauai are their chief resources. By virtue of these rich holdings they rate high enough among the powers that be in Hawaii so that nobody is ever likely to question their behavior toward their vassals.

For three generations the successive heads of the Family—the present head's mother and grandmother filled that post before his day—have maintained a reputation for land-hunger and land-shrewdness which John Jacob Astor might envy. According to hearsay, the Family are just as patriarchal among themselves as toward their vassals. The First Commandment, supplemented by the Proverbs of Solomon, rules regardless. A few years ago, says legend, a younger member got married. The local postmaster suggested that he might want a private mailbox now that he had his own household. "Well," said the bridegroom, "I'll have to ask father about that."

Scions of the house are sent to be educated on the mainland, but they always return to take a place in the Family concerns. It might be argued that the vassals on Niihau, who never are tempted by the outside world and never educated beyond their minimum requirements, are better off than their suzerains. They are certainly not badly off in their own terms.

The houses supplied by the Family are said to be better than average plantation-housing in Hawaii, which is pretty fair, and the level of health is as high as that on Kauai, which has a good record.

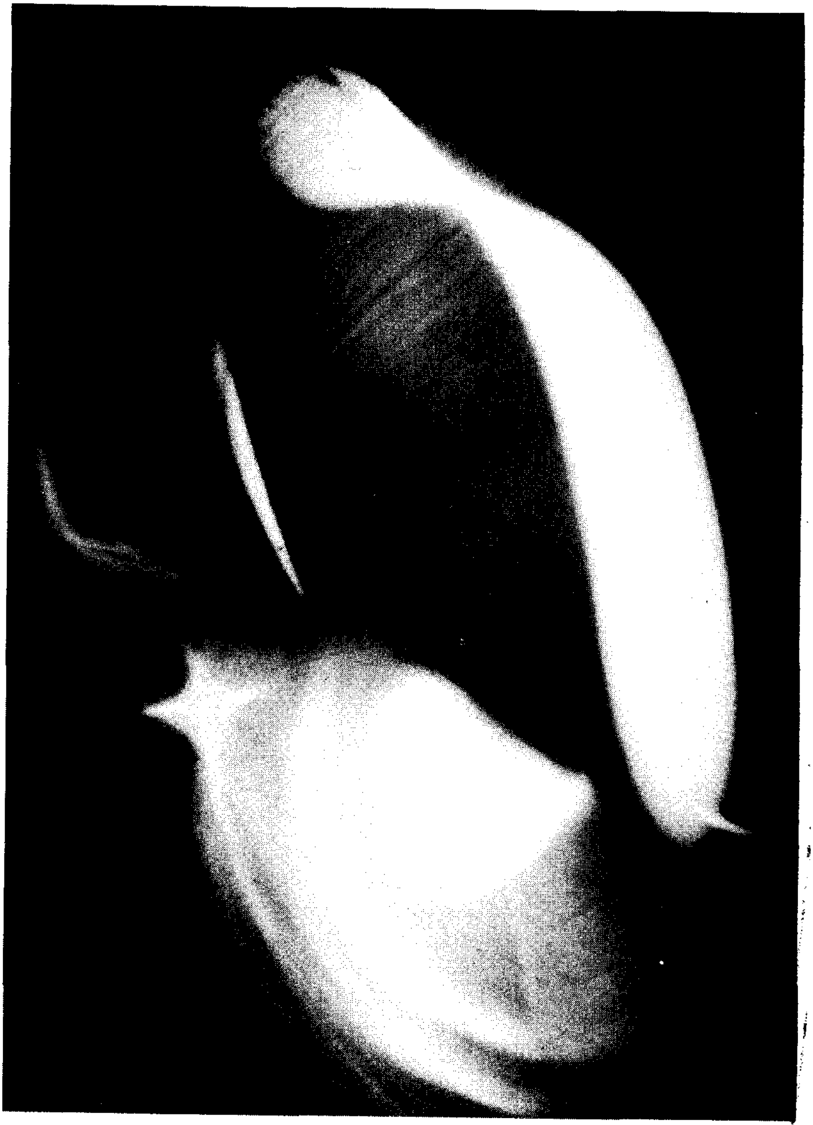
Change may be presently impending. There is reason to believe that, under pressure of increasing population and stationary number of jobs—for Niihau will feed only so much stock—the Family have decided that their kingdom is part of the United States after all.

Not long ago a county inspector who speaks Hawaiian was looking for a certain Hawaiian vassal on Niihau. Another vassal spoke up and said he was working somewhere down on the beach.

"What's he doing down on the beach?"

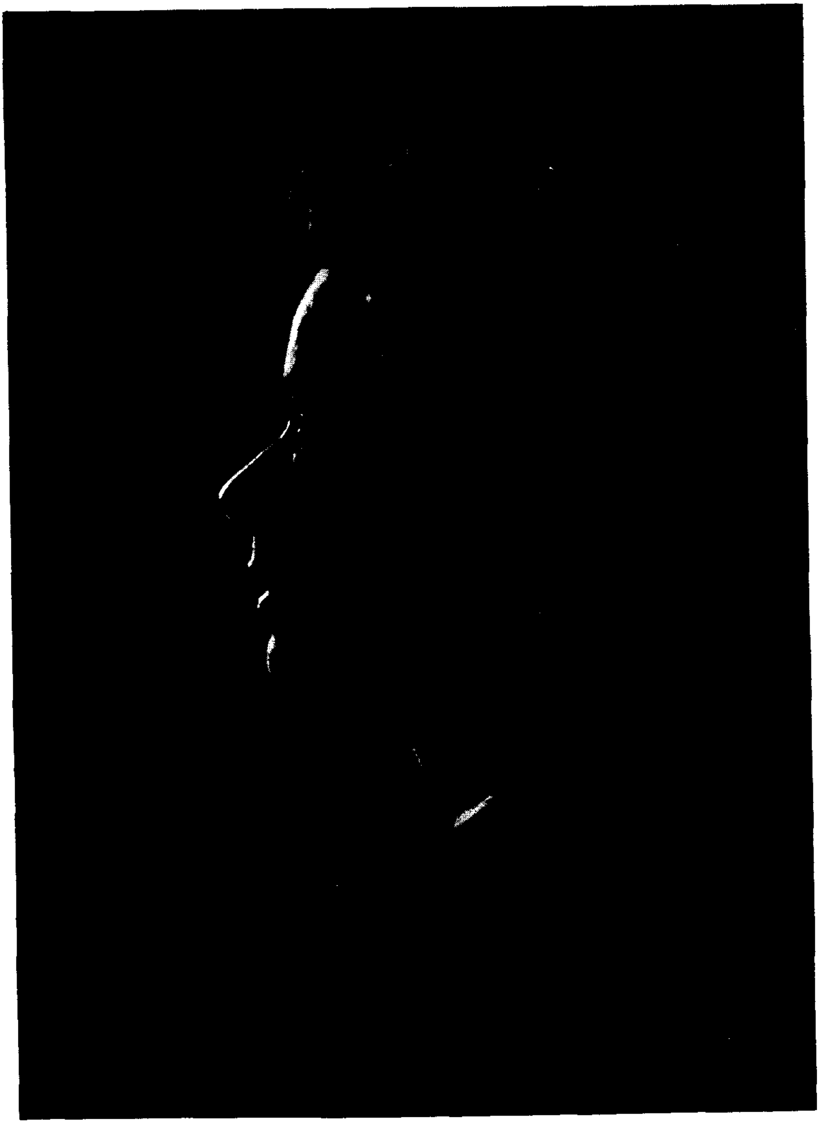
"Working on an FERA project," said the vassal.

—J. C. Furnas



EDWARD QUIGLEY PHILADELPHIA

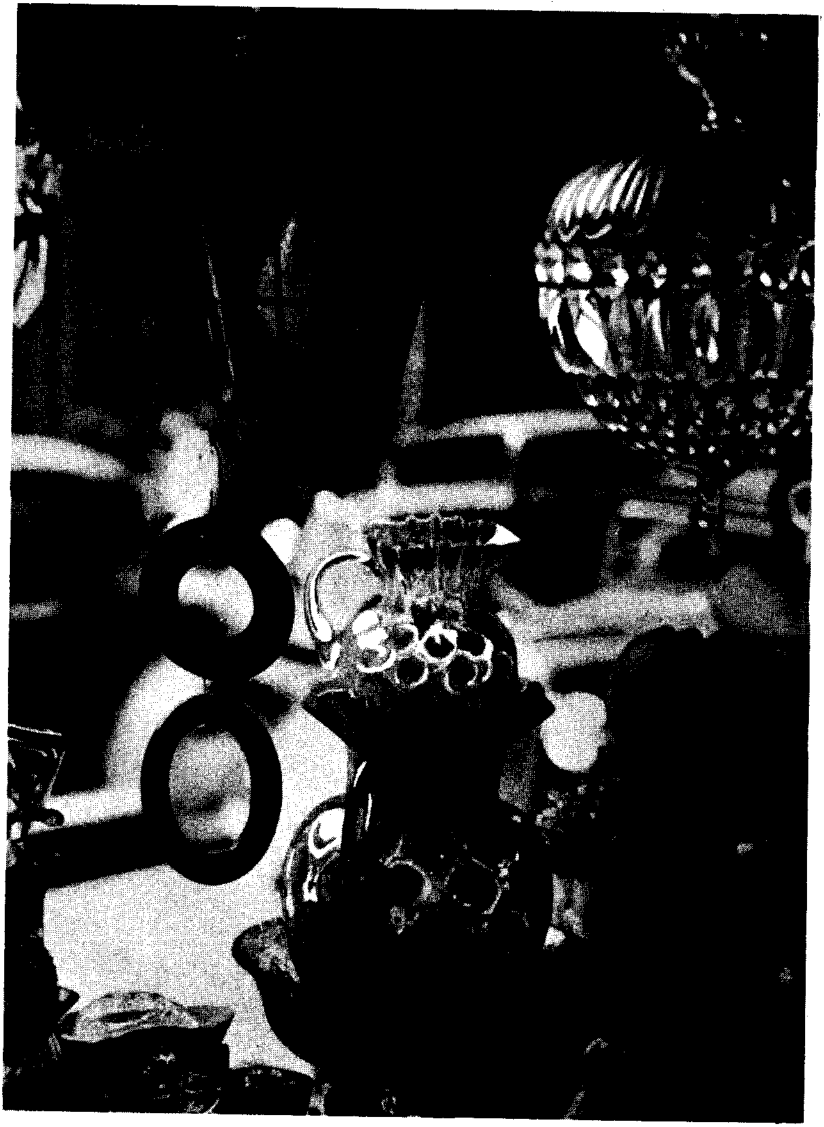
LIGHT



JOHN W. BARRY CEDAR RAPIDS, IA.

. . . AND SOUL

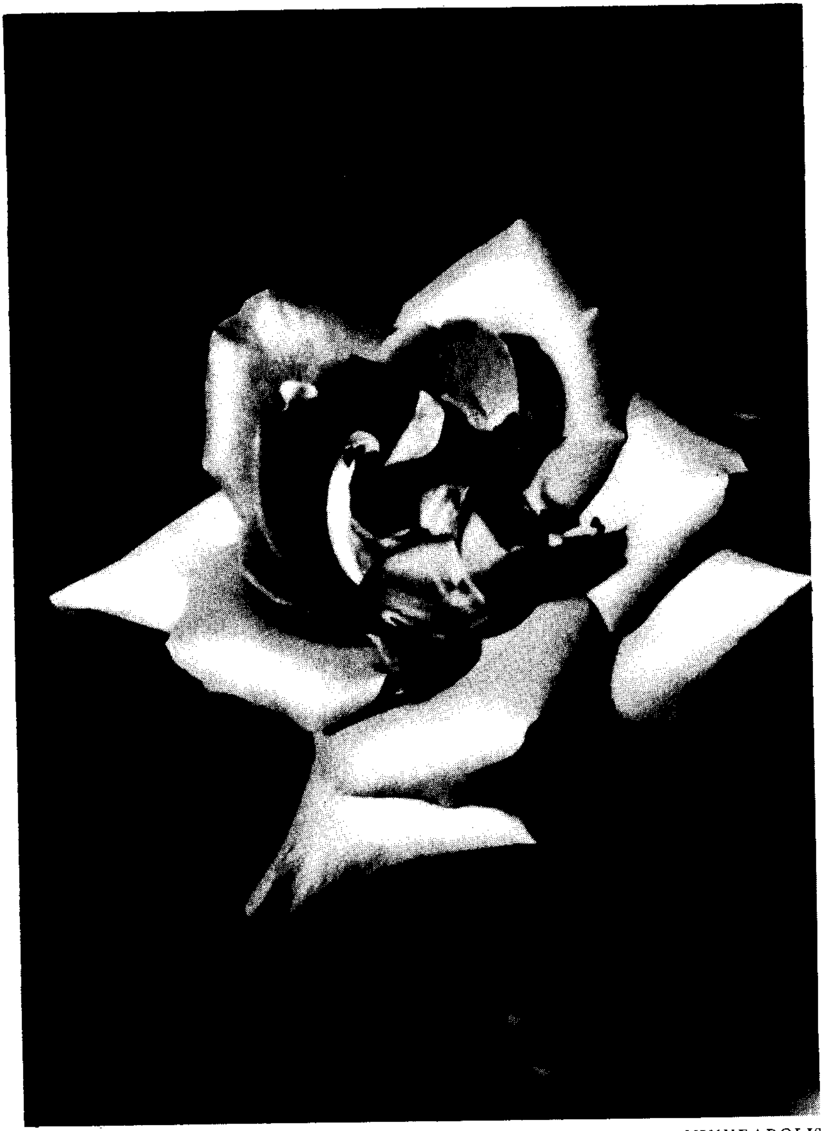
JANUARY, 1937



WESTELIN

CHICAGO

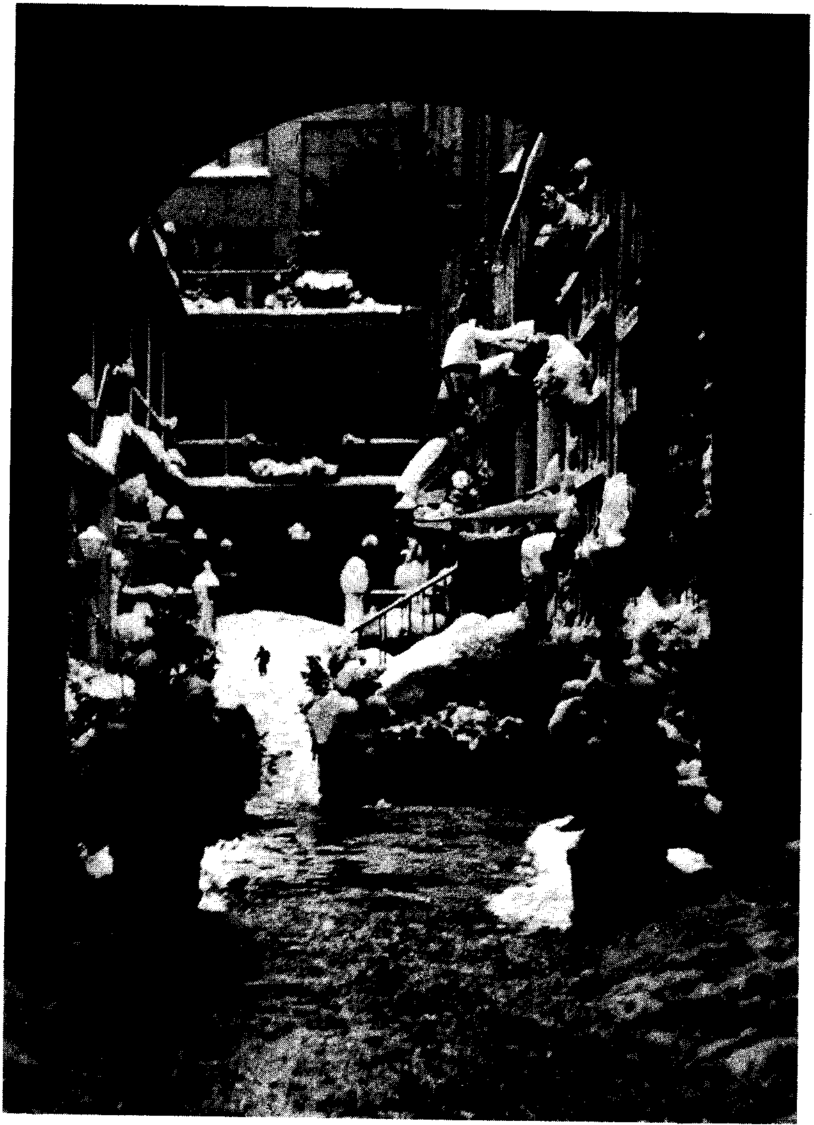
CHINA SHOP



ROBERT L. MC FERRAN — MINNEAPOLIS

HEART OF A ROSE

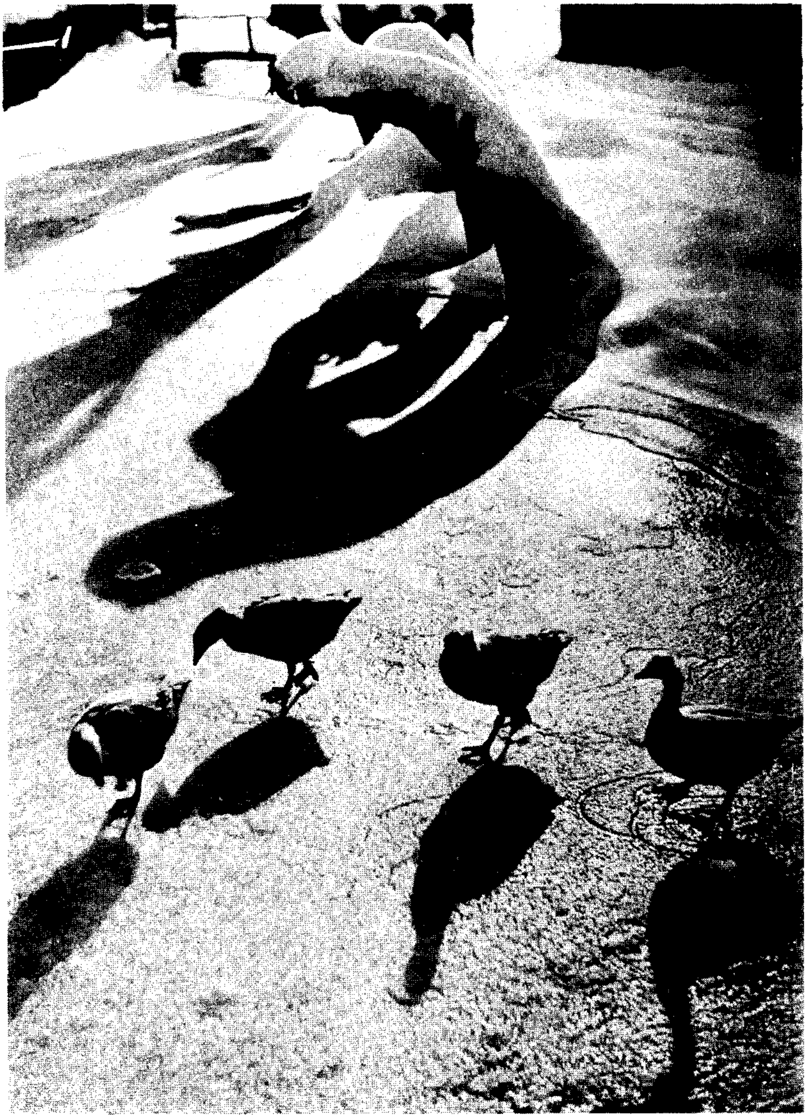
JANUARY, 1937



A. F. MUELLER

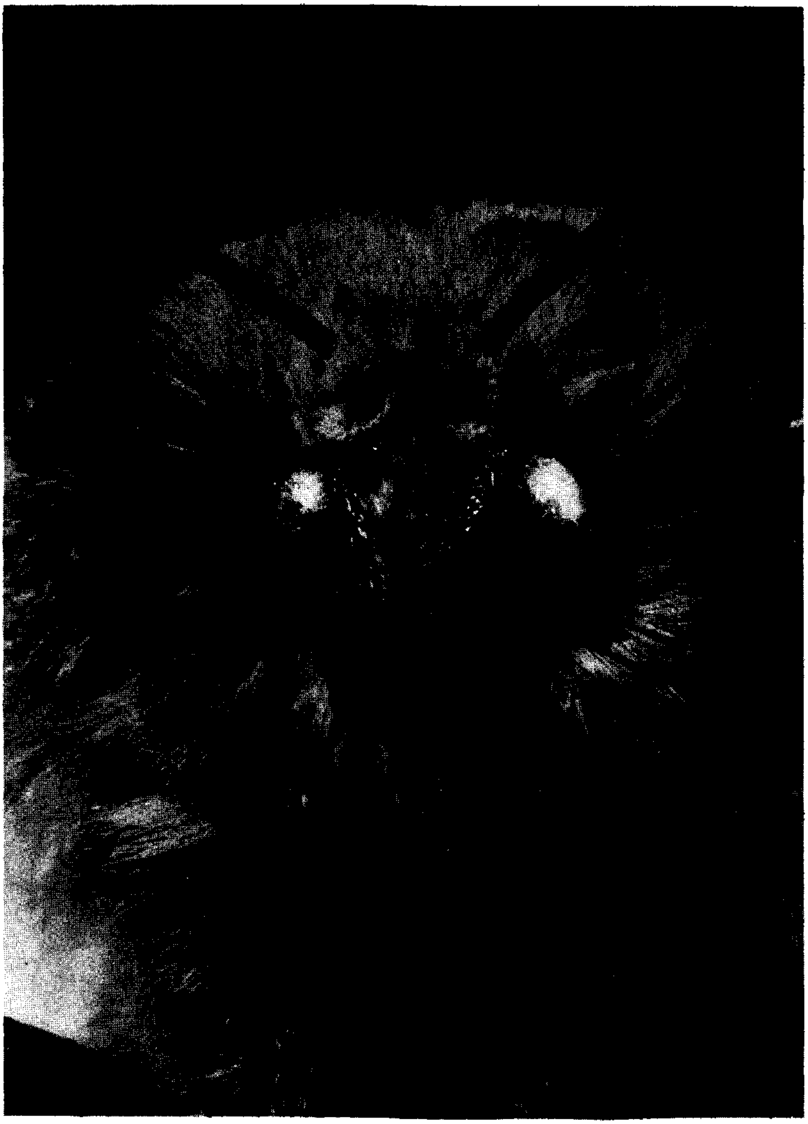
CHICAGO

OLD-WORLD CHICAGO



SCHERL EUROPEAN PHOTO

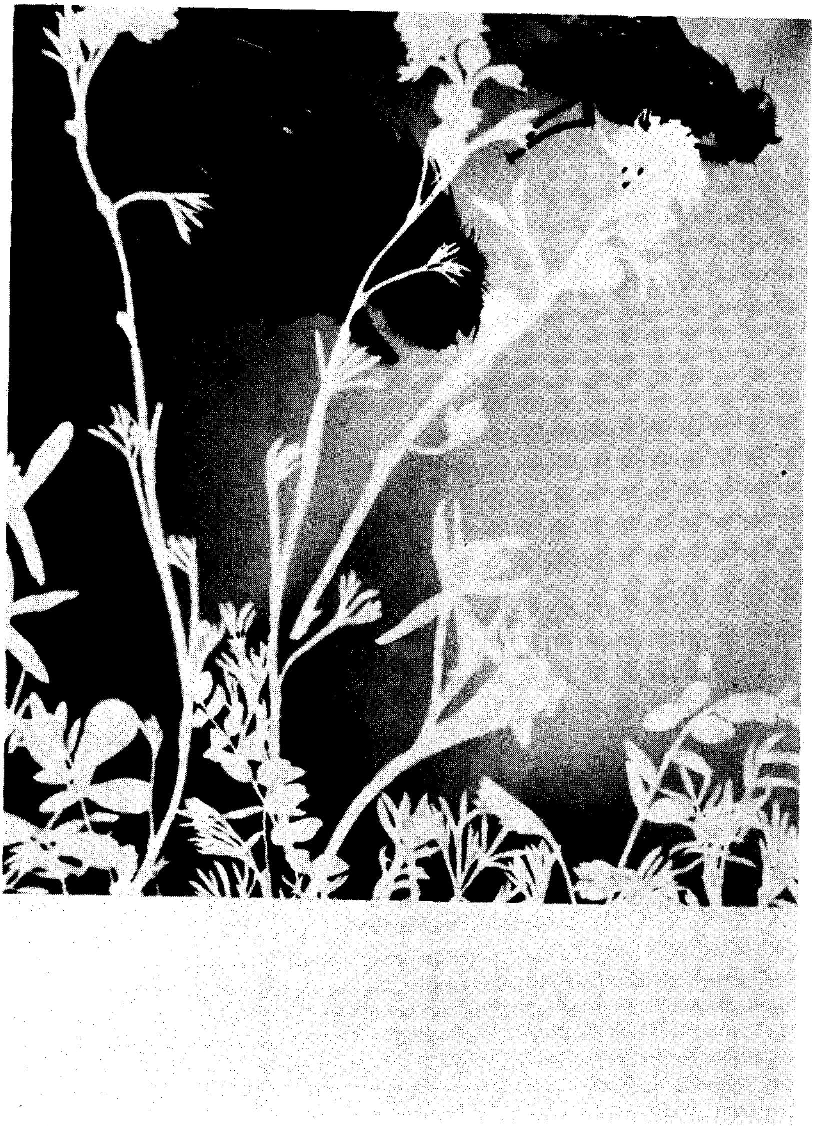
GEESE ON ICE



DR. CROY, BERLIN

BLACK STAR PHOTO

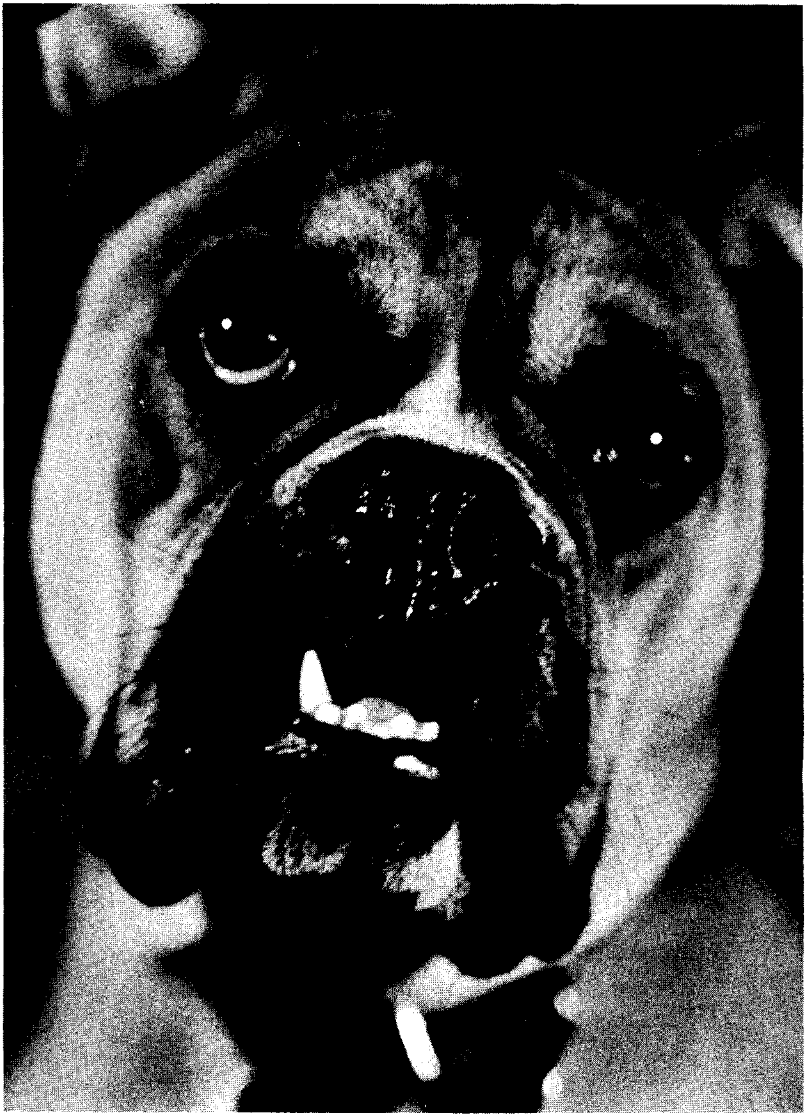
INSECT PORTRAIT



RENÉ ZUBER

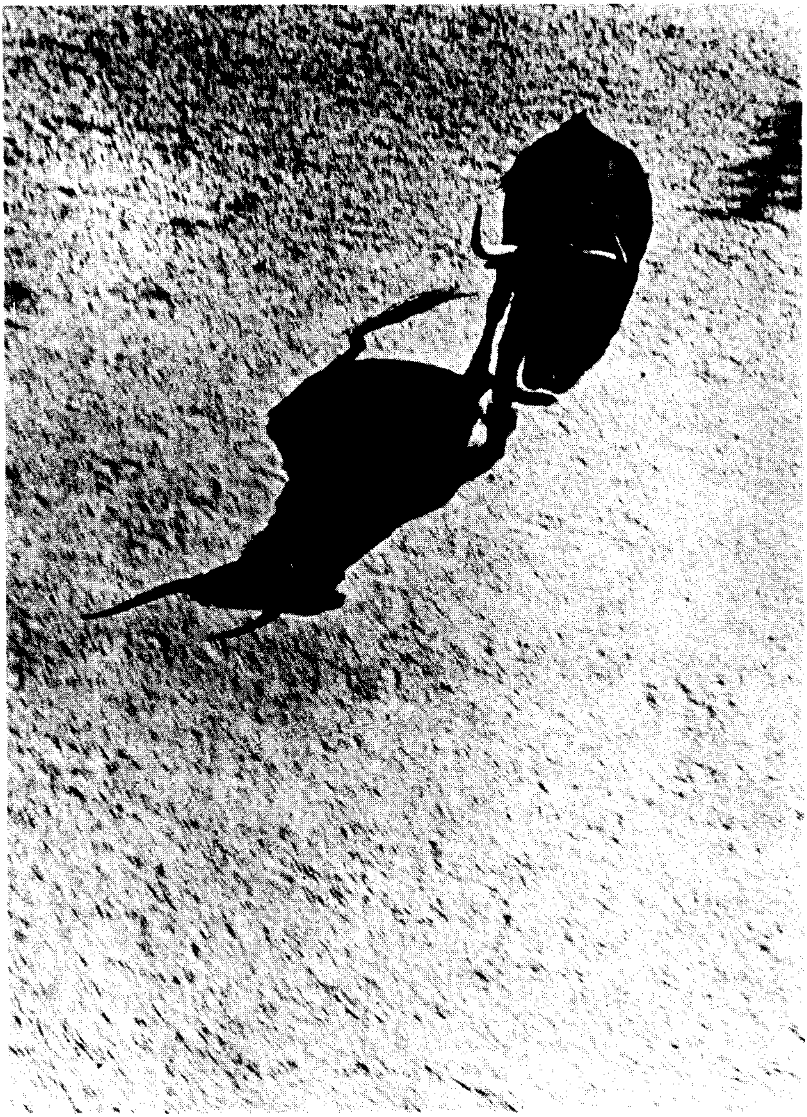
BLACK STAR PHOTO

FLIES AND FLOWERS



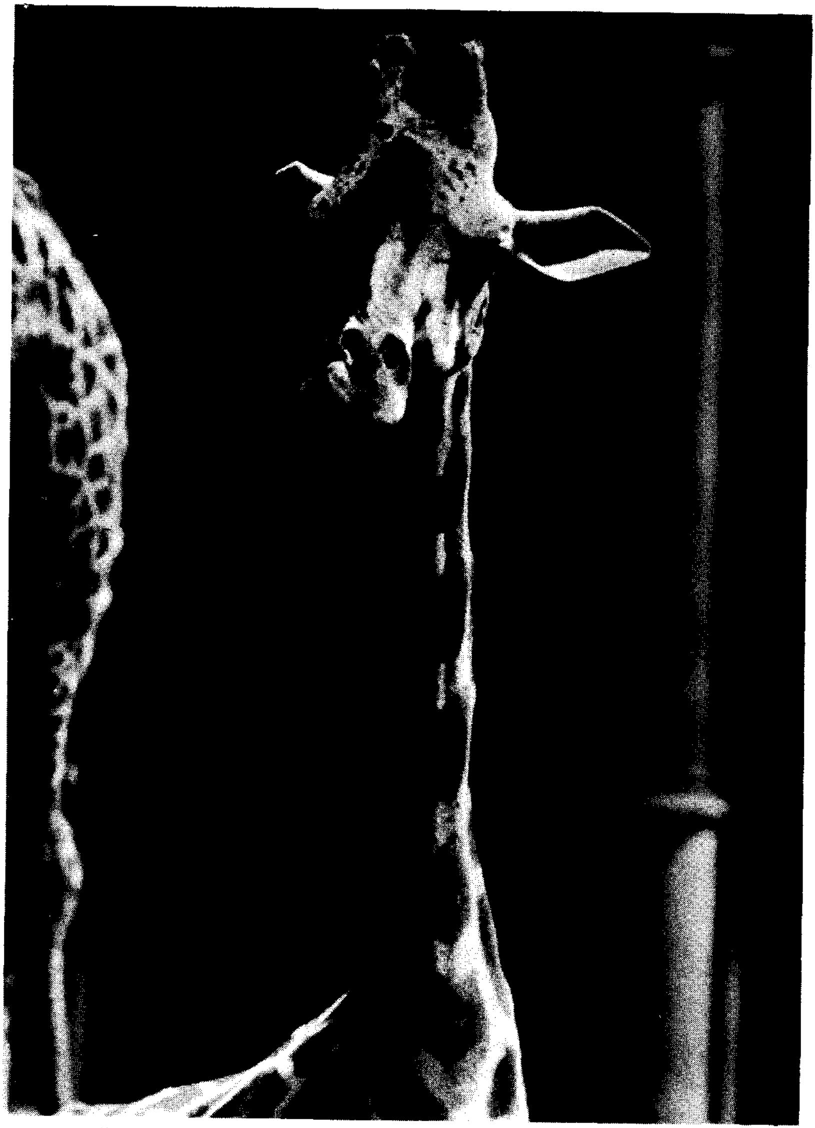
JOSEPH B. WERTZ MAYVILLE, N. Y.

PETER PUDDLES PENDERGRAST



RELANG EUROPEAN PHOTO

LOCO STEER



SEIDENSTÜCKER BLACK STAR PHOTO

THE CYNIC

SEIDENSTÜCKER

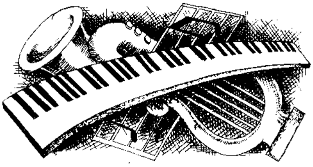
BLACK STAR PHOTO

THE WIT

JANUARY, 1937

LESS WAGNER, PLEASE

ACCUSING THE BUILDER OF BAYREUTH OF BEING A SLAVE OF MERE BIGNESS



WAGNER's popularity in contemporary musical life is an incongruity as obvious on inspection as it is obscure in our passive acceptance of it. That the man was abstractly great can hardly be denied. In this his status speaks for him, and had he never composed a bar of music, he would remain more than a memory in literature, and the historic spokesman for a cultus in the arts which still survives. Nor is he to be condemned for failing to rebuild the world. Had he been less courageous, one could remember his intentions only with respect, and hesitate before raising disfavor against a sincerity which persevered against all the obstacles of defeat and mistrust. The traditional ninety per cent hard work may not make a genius, but when pitted unflinchingly against the odds which he faced, it suggests something very close to it. One may take Wagner's monumental influence alone as evidence of creative fire.

Having admitted as much, sincerely and without reserve, makes it easier for me as a rank amateur, to raise the important question whether or not all this makes his music great. A natural distaste for it is corroborated to me by its root source in the man's consciousness. Wagner the composer was in essence the same as Wagner the theorist and aesthetician. Back of it all is the curious philosophy of the universal art which would embody music, drama, architecture, sculpture and literature; a synthetic product, inspired ultimately by the specious principle that two and two make four, and that if the arts are individually good, they are better combined. Today we have examples of this on every hand. A radio advertiser presents Stokowski and the Philadelphia Orchestra as guests of a popular songster and a swing band. Mexican bands concede to American taste by playing our music on instruments which were built to an entirely different idiom. And—by far most reprehensible because those concerned should know better—our symphony composers affect a cultural *petit trianon* by writing, for full symphony orchestra, 4/4 dance music which can only be decently played by smaller groups of highly specialized, naturally born dance men.

Place the same motives in any other setting, deprive them of the cultus with which they are surrounded, and one would call them what they obviously are—Barnumesque. Had Wagner a sense of humor and less literary clothing, he would have been the typical American carnival impresario. Bayreuth and the big tent spring from the same general concept of the biggest show. The difference is simply in direction. It is evident and far from new that in a passion for superlatives the essential values of music must be lost. But though we have heard this tooted forth for generations, it might as well never have been said. Good music can not be made better by distracting the senses with a melée of stage scenery, iron clad goddesses, fake fire and two ton stallions. Isn't this closer to vaudeville than art? (That is, art as a lofty ideal, which was Wagner's goal.) Anyone who has ever really absorbed great music will feel no need for actors, scenery, field artillery, thunder, lightning and the marines.

Real music can dissolve life and death. It stands alone in eternity. It seems to me that Wagner's conception of the universal art would in other times and under less turgid influences, simply have recognized the obvious—the universality of the greatness of any art.

If he had contented himself with the role of producer, his enthusiasm might have been more legitimately directed. His innovations in the theatre and orchestration were constructive. But orchestration is technic, not inspiration.

Even opera's always innate and then full grown absurdities were insufficient for Wagner. In libretto, in subject, as in music, he was to be superlative. Most of his people are not even mortals, but deities who ride horses through the air. They are great, the music is great. It wrenches, shrieks and thunders from the orchestra, tubas invented for the occasion, and from the throats of great sexless, athletic monsters with the lungs of a theatre organ. Big theme, big orchestration, big personnel, big horses to hold them up, all milling around in a jumble of flowers and feathers, accompanied by a din which would blanche the bronzed face of an artillery sergeant. And his devotees tell us in awed voices that this was so colossal that Bayreuth came into being because there was no other opera house in Europe "great" enough to hold it! It would seem more to the point to suggest that the master's most significant work was a now forgotten opus in which thirty-nine out of his forty characters died, and it was necessary to evoke some of them from the dead to save the last act from being a monologue.

But the really important point in all of this is not its extravagance *per se*, but the vulgarity of its extravagance. There will always be those who consider opera a valid art medium and it would be futile to attempt any original proofs that it is not. Furthermore, there would always be the privilege of not attending it, except that it is brought to us, and that one is not even safe in what should be inviolable programs of symphony and chamber music.

If all of Wagner were comparable to *Parsifal* it would be more palatable. But *Parsifal* is so exceptional as to be unrepresentative. Instead, we have music as uninteresting as the legends it accompanies, all surfeited with the stifling pall of medieval Germany. Here we have none of the healthy simplicity of the classical mythology used by earlier composers. It is all heavy, thick, unsanitary and unpleasant. Even the nineteenth century Italians, now accepted only by chauvinists and suburban culture centers who believe that opera is synonymous with good music, convey more conviction and general good effect than Wagner. They can be cheap as dirt, and their music ugly as sin, but one feels in it the spontaneous gusto of uninhibited, boisterous animal emotion. Even the amazing groups of characters so dear to the heart of all Italian drama—soldiers, nuns, nobles, paupers and lovers—are not as unrealistic as the grandeur of Wagner.

Consider the rumbling gallop of the *Walkyries*. It is little more than consistent. That is, consistent with its military subjects who go shrieking up plank ramps into wings of clothy fire. It suggests neither speed, grace, beauty, nor the impressive power of the supernatural. Its grandeur is the grandeur of size alone, and its phrases churn ponderously over and over like the walking beam of a Corliss engine. It is all muscle bound.

But if Wagner's grandiose epochs are stifling, his tender passages are worse. The *Evening Star* from *Tannhauser*, so beloved of long-haired violinists and amateur singers is an excellent example of this, dribbling down chromatically by minor thirds in a slow singsong waltz tempo. The transitions are in keeping, with their almost pathetic, selfconscious efforts at virility. Similarly, the *Prelude* to *Lohengrin*, in which his admirers find great beauty of its "ethereally divided strings"—a good tonal idea, though it does not compensate for an uninspired theme. And as for the dum dum de dum which guides so many doe-eyed couples to the altar, one can only offer it as explanation of the decreased marriage rate. A composer may be excused for occasionally being trite. But if he pretends to prophesy for a new dispensation he can hardly expect to be excused for being trite all the time. His religious periods (again, except for isolated instances in *Parsifal*) are quite as dull, and usually didactic. His pilgrims in *Tannhauser* seem far less concerned with worship than with telling the world something, which they do at great length. I always feel when I hear this, that if one were to stop them and ask questions, they would become argumentative, personal, and possibly abusive. Perhaps it would be missing the point to compare this with earlier church music, but nevertheless, Wagner apparently sought an effect, and to my mind failed to achieve it, while plenty of others with very limited resources did far better, and didn't gnash their teeth about it. He is continually hoisted on his own petard, tripping over his own skirts, lost in his own notes.

Wagner heralded the popular attitude of today which considers artistic greatness largely in terms of artistic freedom. With him it was undoubtedly sincere, though it served the purposes of art poorly. Textbooks continually proclaim the iconoclasm of the masters. This one set music free from the domination of the church; that one from the confines of the natural scale; a third from purely theoretical harmony. By common consent, these things seem to be considered earmarks of greatness, and the great composers seem to have all been pioneers. Yet why must theory be synonymous with restriction? Bach, and especially the later quartets of Beethoven did not destroy, but fulfilled the law.

The heritage of their predecessors was a framework upon which they mounted new material. None of their period made a fetish of either observance or destruction. Out of their souls they brought forth music. Theory helped make it articulate, and when it was inadequate, they found new means.

If Bach had found the well-tempered scale already established, his music would be nonetheless magnificent. If others had preceded him in contrapuntal development I would still tremble at his architectural conceptions and would continue to be angry with those intrusive commentators who take time out to tell us why, when and where he happened to produce them. It seems to me a poor sign indeed that people must be seduced into appreciation with personalisms about the composer, or technical data which are as irrelevant to the purely subjective effect as steel framework to the appearance or utility of a dwelling. Anatomy in music as in medicine, is for the specialist, not the layman.

To translate pictures into music—which is the chief occupation of opera—is little more than making the orchestra and cast a sound effects mechanism. With all Wagner's proclamations of liberty and false submissions to the "natural" this course is the height of artificiality and ends in imitation, not expression. Why not be content with the prototype?

Wagner's intrinsic shallowness as an esthete is shown in his estimate of Beethoven. He (Wagner) traces the development of music in the earlier symphonies which he eulogizes as the "harmonized dance." (Not, incidentally, because the dance is the most basic rhythmic expression, and rhythm the most basic element of music, but because of his entirely artificial pan-esthetic philosophy.) The great moment, however, arrives when he introduces voices in the *Ninth.*

He "redeems" music by taking it into the realm of super-art. And here again, *not* because the intensity of the conception overreached the limits of the orchestra, but because it was a step toward the five-ring circus of the nineteenth century.

The standard is not that of finish, or craftsmanship, but simply the universal art which should embrace all the rest. The more ingredients, the better the broth.

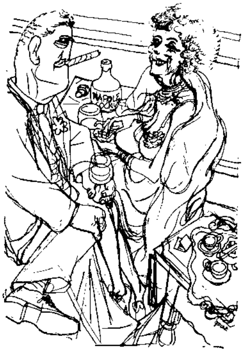
Surely all of this gets music exactly nowhere. Wagner was unquestionably a technician of remarkable ability.

His innovations in scoring show genius of a high order, but unfortunately it has nothing more to convey than that of Victorian cabinet makers who in great glee at the discovery of machinery, turned out soggy oaken furniture covered with a nightmare of sunbursts, curlicues, spindles, dents and incisions. Both are equally skillful technically and equally uninspired.

No dishonor is done Wagner by remembering him for what he was—great in the greatness of a pretentious, ambitious and immature age. His language was that of those times; his thoughts, temperament and words speak of "bigger and better" things as did so many of his contemporaries in this country.

He was the spokesman for an epoch, not for posterity. Newton, Paracelsus, Hypocrates were no less landmarks in history because their scientific dicta have long ago been superseded. Wagner, like them, may deserve an honored place in the museum. He is certainly more enjoyable there than in the concert hall or on the air. —REV. TYLER TURNER

MRS. DUNBAR AT DINNER



This is Mrs. Dunbar at dinner.

She has a sense of equality.

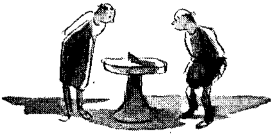
She commands the servants to dine
with her.

The servants give her two weeks
notice.

—O. S. M.

TIME IS MAN-MADE

IT EXISTS ONLY WITHIN OUR MINDS AND NATURE WILL HAVE NONE OF IT



OUR painters have never been very flattering about our earliest ancestors. The caveman is invariably shown as some sort of long haired sub-anthropoid ape, bearing a close resemblance to the Park Avenue idea of a Bolshevik agitator. He is either belaboring a mastodon with his ineffective little stone club or consuming vast quantities of rhinoceros meat, partaking thereof in true picnic style but without the benefit of a paper plate. As for his women, they are low-skulled brutes with walrus teeth sticking through their noses and at least a dozen dirty little brats closely clinging to their modest skirts of sable-skins.

All of which may be true. But underneath these low skulls and underneath all this filth and vermin there must have been a fairly active brain, for this creature so successfully laid the foundations for our own glorious "modern" civilization that all we have had to do since then was to fill in the gaps and enjoy ourselves. The really difficult groundwork was done hundreds of centuries before the Egyptians began to construct their pyramids. It consisted—the groundwork—of inventing practically everything that has helped to set us apart from the rest of the animal world. If you want a few examples, chosen at random, there they are.

Prehistoric man gave us the house, our clothes, the knife and the scissors, the lever, the hammer, the saw, the rope, the rudder and the sail. He discovered the use of fire and furthermore invented every form of container from baskets to pots and pans, which allowed "economic planning for the future," the wheel, without which no private property could ever have been accumulated, and most important, perhaps, of all, the conception of time.

* * *

To realize what this means, will the reader kindly try to think himself back into a world in which the meaning of time was unknown. Where can he find such a world? Everywhere in the universe outside of his own brain and in the brains of a few million of his fellow-bipeds. For in Nature, time in our sense of the word does not exist. Time as we know it is merely the imaginary letter x of the algebraic problems of our childhood days. That letter x was of course an imaginary quantity. It did not really exist but we needed it to solve problems that did exist and therefore we invented it. In the same way we needed a definite "time concept" to live more or less regular lives and because we needed it very badly, it was invented. When and where and by whom we do not know. But when history became vocal and at last began to tell its story by means of hieroglyphics and letters; the idea of time had already been fully developed.

Without thousands of years of careful observing and experimenting, this could never have been accomplished. And it is safe therefore to say that the notion of "time" is actually as old as most of our modern hills. The passing of day into night and the coming and going of the seasons must have been the first time-meters by which the human race tried to establish some sort of order into the timeless eternity by which it found itself surrounded. But they cannot have been very satisfactory, for the seasons do not obey a very precise schedule and day and night are never quite the same. They run from sixteen hours of daylight in the summer to sixteen hours of semi-darkness in the winter. Besides, the sun upon which people would have had to depend to discover the "middle of the day" as we say (or "the hour when the people come to market," as the Greeks used to call it)—that sun is often hidden behind the clouds and as for the moon, it disappears altogether from view for a great many days of every month and is then completely useless.

The division of the day therefore into twenty-four hours of sixty minutes each and the division of these minutes into sixty seconds each is a mere human invention, not based upon any corresponding facts in Nature. But it worked and for everyday use in the sunny countries of the Mediterranean the sundial was there to tell people exactly what "time it was." That, at least, is what they used to think and what they continued to think during the next twenty centuries. But the moment our scientists could get rid of both sun and moon in their time calculations, they did so. Today we run our affairs by the stars. Indeed, the sun could take a couple of years' holiday but "time," in our sense of the word, would go on just as it has done these last thousands of years. Because it is a mere human invention like solid geometry or the tables of multiplication and because it works and satisfies all our needs. So we had better accept time just as it is and not bother our brains about its true inner nature. We may of course some day discover that "true inner nature." But I doubt whether it can be done this side of the mad-house.

* * *

In a civilization which is primarily agricultural, one hardly needs a watch. The cows and sheep will be your timetable. They will let you know when it is time to take them out and feed them or milk them. And whether you start your sowing five minutes earlier or half an hour later matters very little. But life in the cities would come to a complete standstill if it were not carefully regulated by "time." Hence the city has always been in quest of a more or less dependable timepiece. After the sundial came the waterclocks and then all sorts of strange experiments which finally gave us our clocks that are kept going by a pendulum. To the average man of the Middle ages, these seemed an invention of the Devil, which was quite natural for they regulated his hours of labor. To construct a clock therefore in medieval times was a risky business at any moment, the people might rise in their wrath and destroy it as the good Muscovites of the sixteenth century destroyed the first printing-press that was erected in their enlightened city.

Nevertheless, although time "is" but never "marches on," the search for a reliable "time divider" marched on with uninterrupted ardor. For one could not carry the town-clock on one's back and it was therefore necessary to catch the hours and minutes and lock them up into a small and compact little box which people could thereupon slide into their coat pockets just as our women today carry the beauty-salon, reduced to miniature proportions, in their handbags.

The first watch, as far as we know, was manufactured in the city of Nuremberg by a clock-maker who listened to the name of Peter Henlein and who lived during the sixteenth century. Speaking of craftsmanship, that man knew his business, for his first watch was made entirely out of iron. It was tucked away in a metal case that looked like an egg. Hence the earliest name for such watches was "Nuremberg eggs." Primarily however they still were playthings, mere beautiful and expensive curiosities which one rich potentate bestowed upon another whenever he wanted to be very polite. For these sixteenth and seventeeth century watches were usually hidden in ornamental crosses or in sea-shells or in the tummies of miniature little dogs or in tiny little guitars and fiddles or in flowers that opened when the hour was struck. And they might have continued to be just that if modern navigation (which became "modern" in the sixteenth century) had not clamored so loudly for an absolutely reliable timepiece.

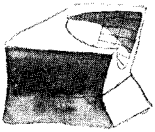
Latitude had never offered any great difficulties but in order to discover his longitude, a mariner was obliged to know the exact hour of noon as it struck in Greenwich or Paris, or Washington or Jerusalem. He could only do that by means of an absolutely reliable timepiece which told him when it was midday in some city which he could definitely locate on his longitudinal map. For almost a whole century the navigator awaited the mechanical genius who could contribute this absolutely dependable timepiece. The final result was the chronometer with which John Harrison won the prize of one hundred thousand dollars offered by the British government.

This chronometer still exists and still runs but it was very complicated and too expensive for the average mariner. But in the year 1785 the Harrison contraption was greatly simplified by Pierre le Roy of Paris so that it could now be manufactured at a reasonable price and was well within the reach of every prosperous skipper.

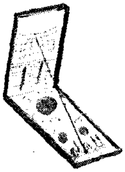
And that meant the end to the beautiful little watches of the previous two centuries. The prosaic but practical chronometer, infinitely more reliable than any mere watch, promptly relegated the Nuremberg eggs to the museum of mechanical curiosities.

Then one fine day came Signor Marconi and the noon time signal of the Greenwich or Washington observatories. Whereupon the chronometer lost its former life-and-death importance and became merely a handy thing to have in case your wireless should unexpectedly give out. The skipper and his mates still appear on the bridge just before luncheon time. But navigation now listens to the still small voice that comes from the radio loud-speaker which announces: "This is the Coronet Broadcasting Company . . . When you hear the long dash it is exactly noon in the naval observatory of Arlington . . . . ping . . . ping . . . ping . . . ping . . . . piiiiiiiiing!"

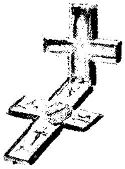
—HENDRIK WILLEM VAN LOON



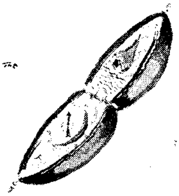
[illegible] [illegible] sundial made of
baked clay.



Portable sundial of the seventeenth century



The oldest known watch is in the
form of a crucifix

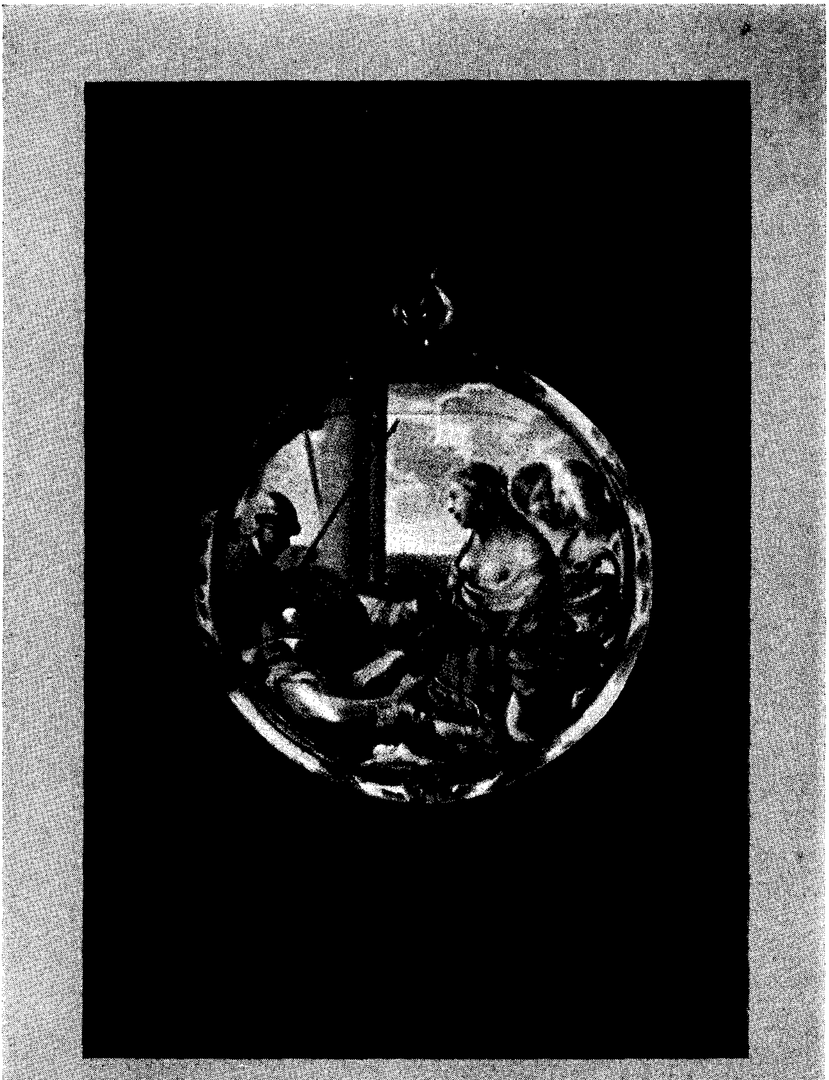


The Nuremberg Egg
of the sixteenth century

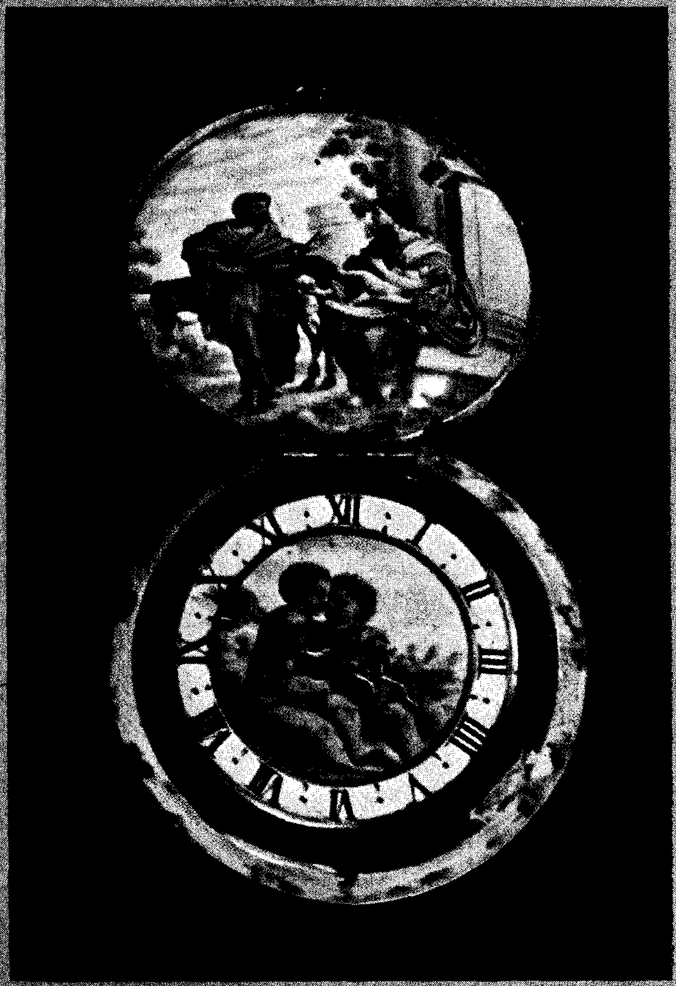
SKETCHES BY THE AUTHOR

ALL WATCHES, METROPOLITAN MUSEUM OF ART, N. Y.

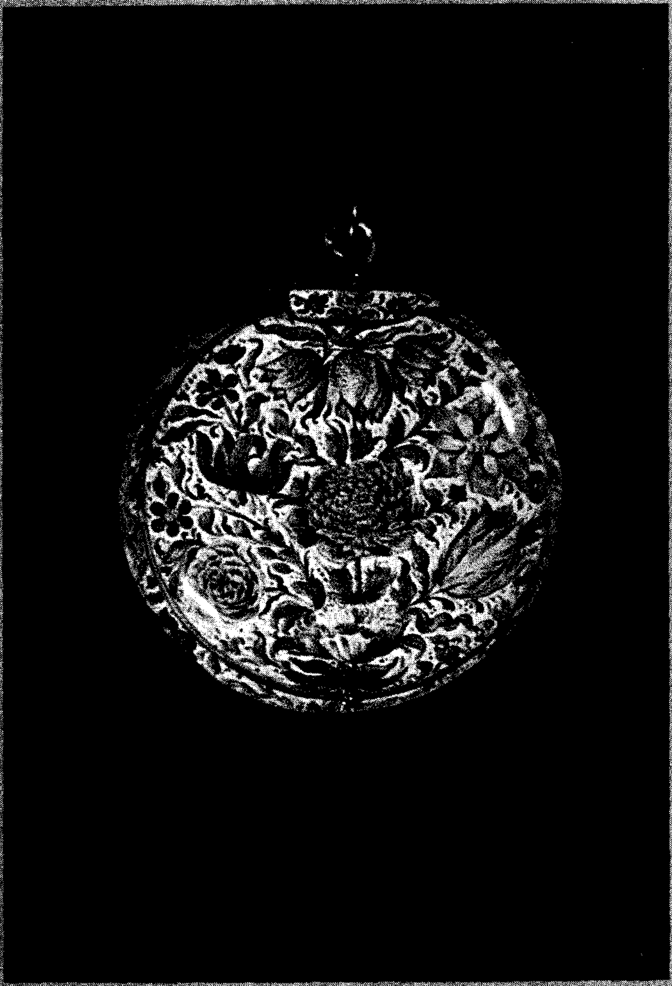
Oval watch of gilt metal with Limoges enamel panels (extremely rare), the movement signed by D. Ramsay, one of the finest of the early makers. Born in Scotland in 1590, he learned his trade in Paris whence he went to London in 1610, where he became the king's clockmaker.



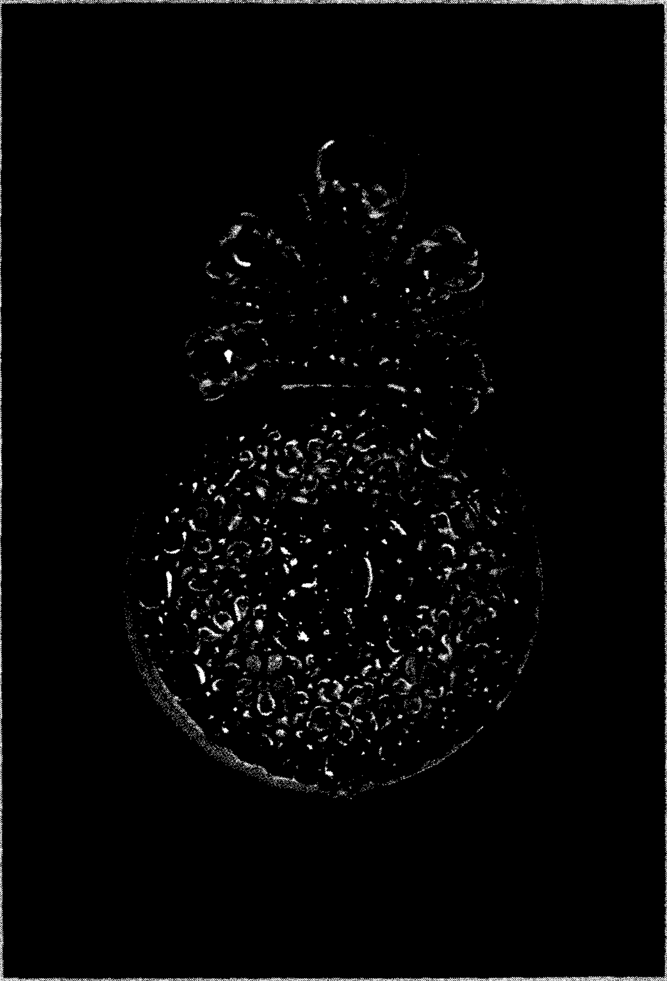
The enameled scenes on this seventeenth century Dutch watch represent incidents from the love story of Antony and Cleopatra, then newly popularized (circa 1630) by Shakespeare's "best-selling" play. The movement is signed P. Landre à Bruselle. Hilton Price Collection.



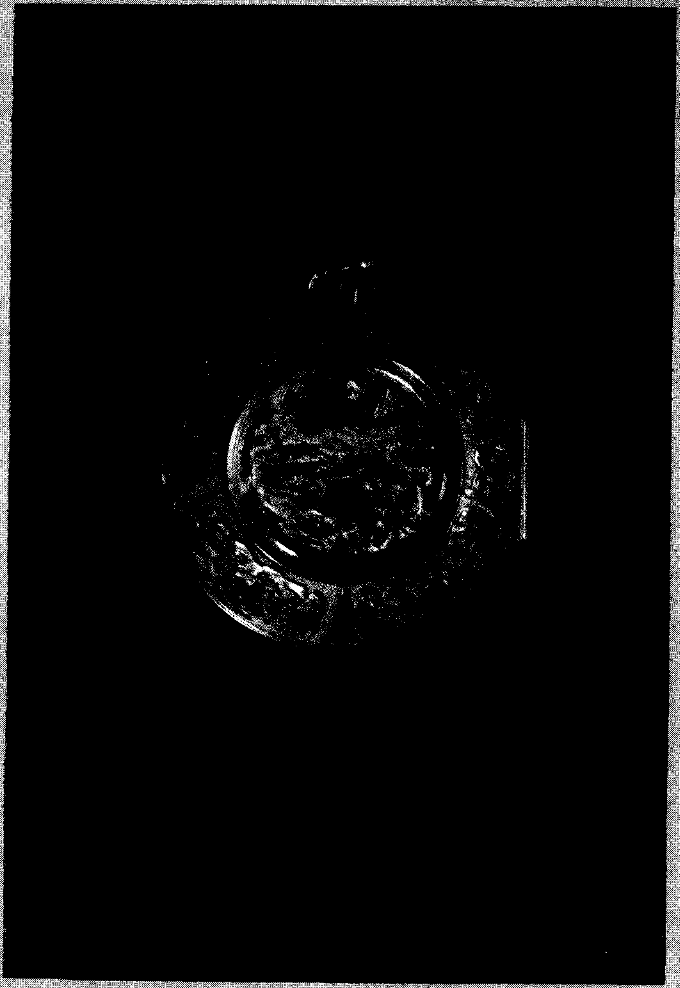
Circular watch of gilt metal and enamel, the movement signed by Goullens, a famous Paris watchmaker from 1640 to 1660, of whose works but seven are known to be in existence today, three of which are in the Metropolitan Museum. This one is from the Georgi Collection.



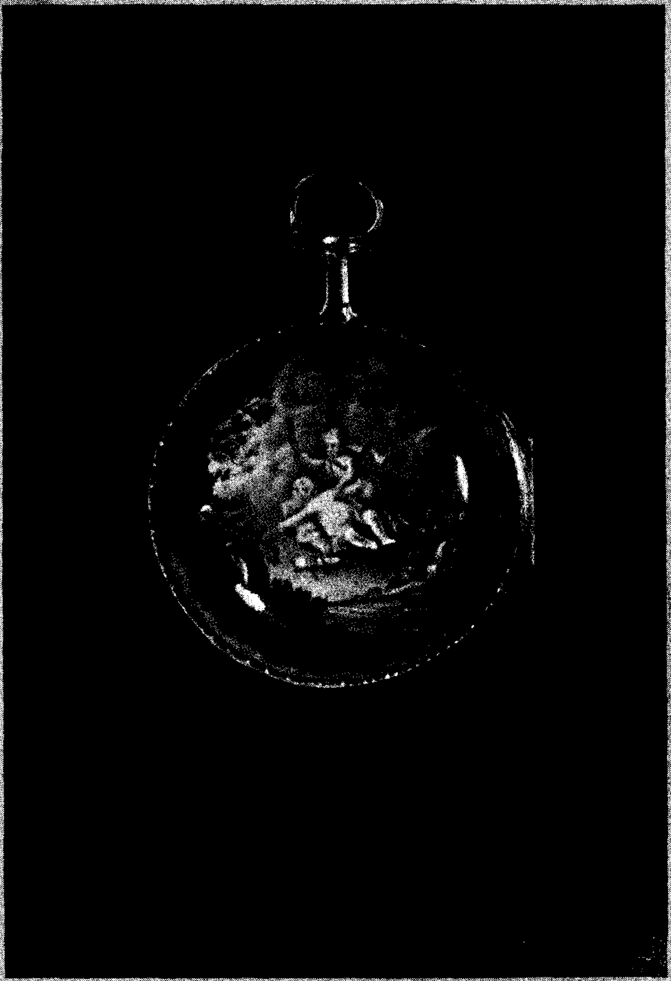
A case by Christophe Morlière, one of the first painters on enamel. Born at Orleans in 1604 he moved in 1628 to Blois, where he became the goldsmith and engraver to *Monsieur le frère du roi*, to whom the town presented in 1643 a watch engraved by Morlière. Marfels Collection.



The Great Ruby Watch from the collection of the late Baroness Alphonse de Rothschild, of gold enamel and jewels, movement signed by Nicholaus Rugendas, Aug., who was the third maker of that name in Augsburg between 1585 and 1745. Attributed to the period 1670-1730.



Mechanical watch of almost globular proportions, with case of exceptional beauty, being of agate with gold and crystal trim and decoration. The movement is dated 1710 but is unsigned. The watch is known, however, to be the work of an English maker. Marfels Collection.



A gold repeater watch with enameled and jeweled case. The face shows the arms of Herbert Viscount of Windsor. The movement is signed by R. D. Gregg, who was a London watchmaker of the mid-eighteenth century, few of whose watches are to be found in museums.

Enameled case set with diamonds. From 1500 (invention of mainspring) to 1700 the watch was a costly toy. After the adoption of movement jeweling it progressed toward the status of a precision instrument. Watches of the second period are in another section: see page 105.

1776: A CLOSE-UP

RESCUING THE REVOLUTION FROM THE D. A. R. FOR A LITTLE CLOSER LOOK

LETTERS and written reminiscences by thousands, of people from Maine to Georgia who recorded events as they lived them, give a curious picture of our country in those years from 1775 to 1781, during the great free-for-all that ushered in our national existence. In terms of actual combat—whether with cannon, bayonet, brickbats or vocabularies—by far the greatest part of the Revolution was fought outside the battle fields and off the records generally.

We were not Americans before 1775. We were New Yorkers, Virginians and whatnot, hating and intriguing against each other incessantly with only the common animosity against King George and his ministry to hold us together. Each colony had its militia system, mostly on paper, because none of the colonies would tolerate a standing army and the British would not have permitted one anyway.

Thus when the news of Lexington and Bunker Hill swept across the countryside, crystallizing all factions, it suddenly gave these rudimentary militias a public prominence they had never dreamed of. The whole country seethed. From cities and hamlets all up and down the coast, adventure-loving men and boys set off for Boston, singly or in groups, without much idea of what they would find when they got there or what they would do about it. Some of them reached Boston and fought through the war. Others were satisfied with this proof of good intention, and went back to work next day. Many tried to organize into companies before starting. Their officers were selected more for local prominence than military experience, and it seemed to be the custom to give them titles to match their civil standing. There were generals commanding twenty men, if their countryside prestige demanded this recognition. There were captains commanding the numerical strength of battalions; majors and colonels with no command at all, but with a sort of roving commission their admirers had bestowed on them.

Washington's chief difficulty, when he set out to weld an actual army of these enthusiasts, was the irresponsibility of his own troops. He was general of thirteen miniature armies, one from each colony. The Continental Army sponsored by Congress was recruited indeed from all the colonies, with their own pledged consent, but this worked out to be a sort of skeleton organization, to which the colonies in each battle area were supposed to supply the flesh and blood. But as their mighty leader crossed one boundary after the other, his troops insisted on returning to their own farms. Connecticut men were not interested in fighting New York's battles, and both hated New Jersey. Their attitude of course increased the bitterness between the colonies, and made Washington complain that he was forced to recruit a new army for every campaign.

Outside a predisposition for his own home town, the American private soldier had everything for fighting a successful war, except training, discipline, leadership, munitions, equipment and so much as a vestige of military knowledge. Many of the recruits were backwoodsmen, whose savage ways and deadly marksmanship appalled even the colonists. They dressed in skins, and carried long rifles that could hit a shilling piece at two hundred feet. A regiment of these men traveled to Boston from Creasaps, Virginia, whooping and war dancing, doing terrifying rifle stunts all the way, tarring and feathering all Tories within reach and stealing their supplies indiscriminately as they proceeded. These old Indian fighters were invincible shots. A favorite exploit was to have one comrade hold out a shingle while another shot it to pieces at sixty paces. Two brothers went even further, one would hold a narrow board wedged between his thighs while the other would slowly rip it up with shot after shot at distances from eighty to one hundred feet. To determine the best marksmen among a hundred Pennsylvania trappers, a man's nose was traced on a shingle and set up as a mark at one hundred paces. The contest was never settled, for the first sixty entrants shot the nose to pieces.

Another point that nonplussed the colonists was the matter of enlistments. They were willing enough to fight if the occasion offered, but why bind themselves to stay on with an army when the fall ploughing was coming on, and they didn't like their captain? The statistical confusion which resulted has headed many a historian toward the madhouse. One example will show why. Ebenezer Fox, aged fifteen, is discussing the welfare of the state with a companion on the common of his New England home town, and the two casually decide to take a look at the war themselves. They set off for Boston and get as far as Providence. There young Ebenezer enlists on a privateer, just outfitting. The privateer is chased on a lee shore by the British and wrecked. Young Ebenezer escapes with his life but without a stitch of clothing. He coyly manages to secure raiment, and then proceeds to Boston where he enlists again, in the Continental Army. After two months he grows tired of this life and re-enlists on an American frigate. The frigate is captured and young Ebenezer lands in the notorious Jersey prison ship in New York harbor. After three months he is offered his liberty, provided he will join a British detachment that is going to garrison a fort at Jamaica, in the West Indies. So he enlists in the British army, planning to desert at the first opportunity. He does this, and after some wild adventures signs on an American cruiser in Cuba. But a press gang from a French man-of-war waylays him and he finds himself in the service of the King of France. Again he escapes, rejoins the Americans, and ends the war on the French coast.

Here, then, is an enthusiast who enlisted seven times with one honorable discharge, who served on both land and sea, with American, British and French forces. His case is cited here because while somewhat more hectic than the average, it is very typical. Some 662,000 enlistments are recorded during the American Revolution; yet no one will ever know how many soldiers and sailors we had under arms. We cannot assume that the figure is excessive so far as actual fighting strength is concerned, because unknown numbers of patriots served through the war without enlisting at all. Many others took part in unofficial raids which history notes, but cannot account for the raiders.

In the height of the trouble, sixteen inhabitants of New Haven became impatient over the utterances of three Westchester New York Loyalists—Bishop Samuel Seabury, ancestor of New York's scourge of Tammany Hall; Lord Underhill, mayor of Westchester; and Judge Fowler of His Majesty's District Court. They set out to extirpate this trio, stopping on the way to burn a Tory sloop at Stamford, apparently in a spirit of clean fun. Next they met a body of eighty colonial soldiers with officers at their head. Instead of joining these constituted troops, the troops joined the raiders and all marched to Westchester and duly captured the malcontent three.

The raiders' job was done but their spirits were unquenched so they went to New York, wrecked the printshop of a Loyalist newspaper, and then returned to New Haven where the excursion ended in a grand party which lasted all night. Are these men entitled to recognition and pensions as true fighters in Freedom's Cause, or not? If so, two thirds of Colonial America is entitled to honorable discharge, pensions, and their descendants to membership in archaic societies for the perpetuation of their ancestors' deeds.

The episode is an example in clear relief, of the wholehearted methods of Tories and Patriots in going after each other. The country blazed with fires of partisans' farmhouses. Tar and feathers became familiar costumes, far more popular with the designers than with the wearers. There are stories of victims having to pluck the geese for their own feathers, while their judges applied the tar. The Patriots were particularly vicious in their treatment of the tax collectors, justices and other officers of the Crown. Yet there are very few records of actual murder by these mobs. The killings were left to the army, and to the incessant guerrilla warfare that raged through the Colonies. The people usually contented themselves with whimsical tricks, such as hoisting tax collectors and constables by the seats of their breeches up flag poles, to enjoy the brisk February air for half a day. If they died of pneumonia afterwards, that was only the justice of Heaven! It was a common practice for raiding parties of both sides to make the victims sign effulgent papers, pledging their allegience to the dominant cause, and thanking their captors for their mild and gentlemanly behavior.

On Cape Cod a noncombatant, Jesse Dunbar, bought some cattle of a King's Counsel named Thomas. The mob caught him and stuffed him inside one of his eviscerated cows, assessed him $1.00 transportation fee, and rode him inside his cow from Plymouth to Kingston. There another mob took over, charged him another dollar and forwarded him to Duxborough. There he paid the customary carfare for a return trip to Thomas' house, where Thomas was forced to give the mobsters the price of the cattle.

Life was always tough for the noncombatants. Numerically they were as strong as their quarreling neighbors. But they lacked the inspiration of a Cause to get excited over, and they had no organization. So plotting Loyalists used them as stalking horses against the Patriots, and could always find excuse to raid their farms in the King's name while sympathetic justices abetted them and shared the loot. The Patriots stole what they wanted, feeling sure of the protection of their friends in the army, and knowing that their victims felt sure of the same thing. The Continental Army levied on their farms at will, paying for its takings sometimes in promissory notes and sometimes in paper currency worth a few cents a bale. The British Army made no such pretensions. It seized what it wanted where it wanted from everyone indiscriminately in the well known names of God and Country. Of course all this highbinding proceeded in strict accord with the military ethics of all times. If you were on the side of the marauders, you should feel honored to chip in a few cattle and groceries for the Cause; if not, you were an enemy and God would not love the soldier who declined to rob you. If you were non-partisan you had no friends, so why worry? One had to be rugged indeed, to be an individualist those days!

Outside the enlisted ranks, then, the Revolution was anybody's war: everybody's chance to pick his own style of combat, whether the preference was for following a real army, or engaging in unofficial raids on obnoxious settlements, marauding for profit on land or sea, or sniping at Loyalist neighbors or burning their houses in the night. If these sports were too energetic or too dubious as to consequences, there was plotting and counterplotting with the other fellow taking all the risks, and there were mouthy orations to be delivered in taverns; jingo newspapers to spread defiance to the Enemy—until the enemy's troops or perhaps some of his bushwhacking partisans landed in the editor's bailiwick; fat political plums to be shaken from the governmental trees; juicy contracts for munitions and supplies with no inspector to check up; feed and vegetables to be grown and sold at war time prices, unless enemy raids got them for nothing first. It was a very busy America, and two-thirds of the two millions had a hand in the excitement.

The country was bombarded with propaganda, whispering campaigns and stories of British and American atrocities that would point rather sickeningly to the origin of many of our own literary efforts during the late World War, except that the same stories are found in the British Revolution of the previous century, and probably were heard during Joshua's attack on the walls of Jericho. The Indians supplied some horrible facts for new atrocity stories, and there were naturally the few authentic examples of rapine and torture that always occur when soldiers go blood-crazy, no matter what their nationality. But in general the troops fought cleanly, and left wanton injury and Billingsgate to their partisans on the side lines.

Propaganda was manufactured to order after the accustomed manner. The proper factions were told that Washington and his wife had quarreled and separated over the question of Independence; that the British had used the North Church of Boston as a stable and then destroyed it; that the people of London had rebelled against the King and Parliament, and forced the King to barricade himself in Windsor Castle; that the British were shipping poisoned rum across New Jersey in the hope that the Americans would capture it; that Lafayette over some personal insult had challenged every member of Congress; that Washington had delayed an uprising of Irish Continentals by declaring for the independence of Ireland as one of America's objectives; that Lee had been assassinated after he had surrendered. Both sides consumed the customary energy in proving that the Lord was their ally. Elizabeth Shipley of Wilmington on her dying bed had a vision of American freedom. This let loose a whole battery of portents to uphold one side and discourage the other.

Patriotism, whether for King or Congress, expressed itself throughout the war in popular songs, in jingles, satires and flamboyant oratory, but most of all in *Yankee Doodle*. No one knows just where this spritely tune originated, though it has been traced to at least twelve different origins. Something close to it existed in pre-Revolutionary days, and was known as *Lydia Fisher's Jig*.

At first the British used it to express their sarcasm over the Yankees and their army. Percy's reinforcements went out from Boston to this tune, to reinforce the British at Lexington and Concord.

They came back too otherwise occupied to play any kind of a tune whereupon *Yankee Doodle* became the symbol of defiance for the jubilant Americans. Literally hundreds of stanzas were composed to its lilt, all of them in the spirit of merriment or mockery which is the essence of this deathless little air. One version of this song was chanted by the Dutch, who may have originated it, though this is against the probabilities. Even the streets of London rang with lampoons on Lord North as well as on Pitt which were set to the music of *Yankee Doodle*. It is impossible to be serious to its strains; otherwise it would be the only claimant for the honor of our national song. But this cannot be. There is too much *Yankee Doodle* inherent in the American nature ever to let us admit that truth, by doing reverence to its cadences.

All throughout those years the settling of a new country went forward. The farms were tilled, forests cleared, crops went to market despite raids and house burnings and the tread of enemy troops.

It was a rough hewn country of homespun pleasures and homespun hates, quarreling, fighting, and house-burning among themselves with eyes on a high ideal but taking advantage of every petty opportunity meantime. A perfectly proper spirit. The world could not go on if its heroes did not take time out for lunch. They could not eat unless thrifty business men were ready to supply patriotic provender for all that the traffic would bear. These humbler historians offer a less glittering view than the sonorous text book writers, but after all a more uplifting one. Delving into their musty accounts one gets the feeling that the military victories of the Revolution did not much matter. The armies generally held the ground they stood on and little besides. If the British had won every battle, they might still be trying to conquer the Thirteen Colonies; for it was a people's war, and the people won it.

—EDWARD M. BARROWS

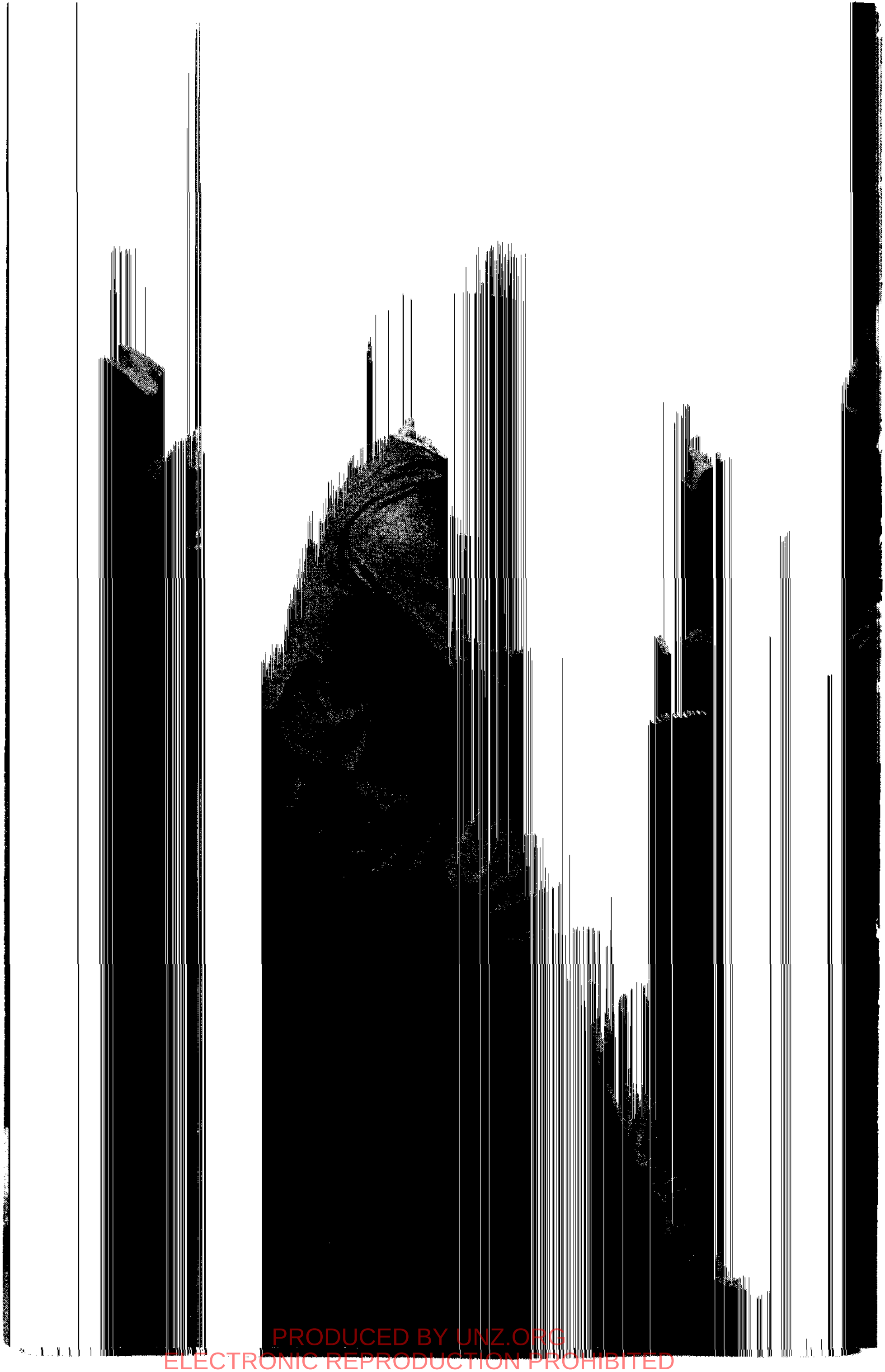
Dr. Barrows, onetime newspaperman and college professor, has been active as a free-lance writer since 1930; he lives in Greenwich Village; he was a college chum of the late George Bellows.

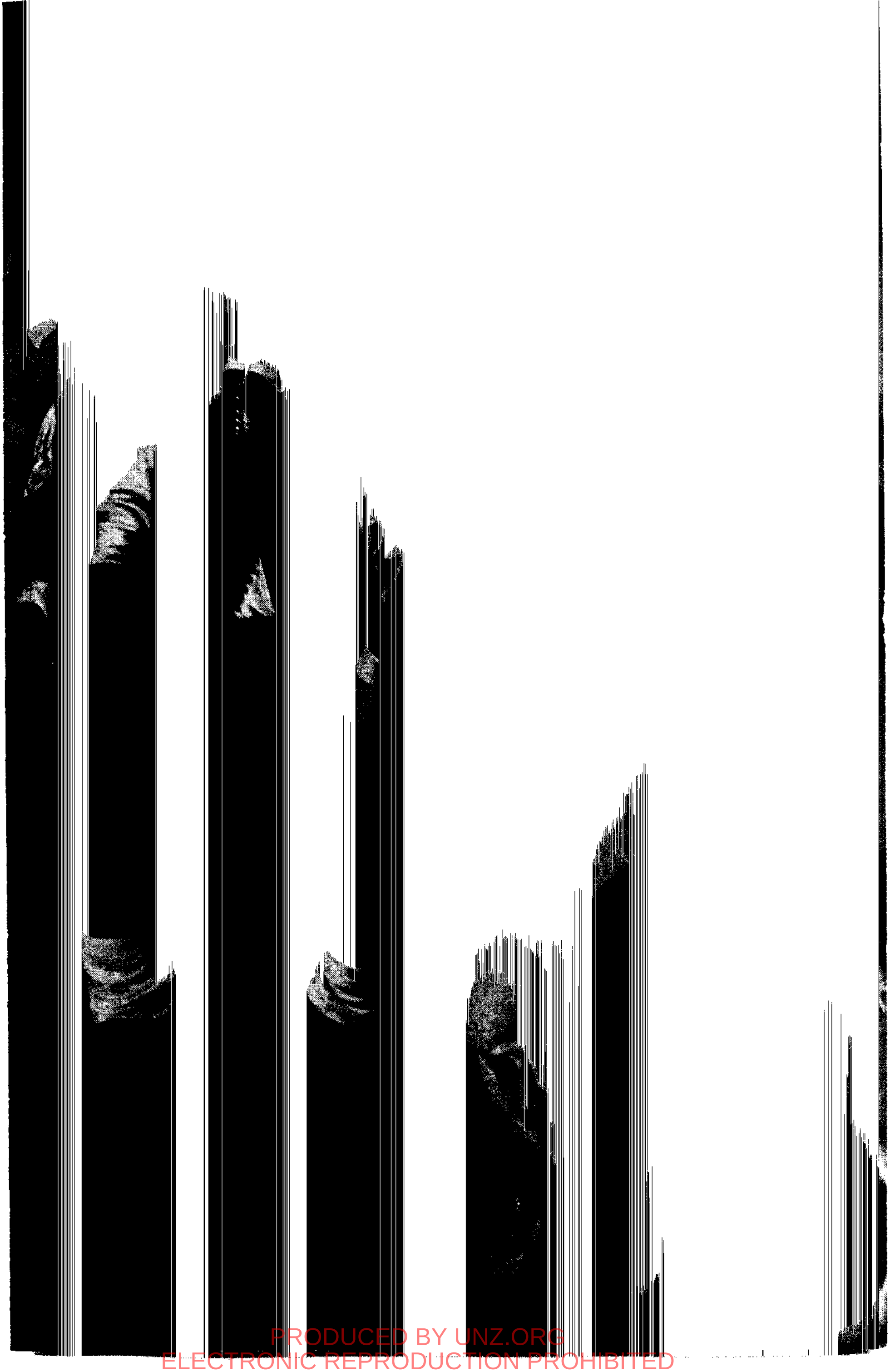
THE DICE PLAYERS

by MATHIEU LE NAIN

(1607(?)-1677)

A painting loaned by the Rijksmuseum of Amsterdam, Holland, shown in the exhibition of paintings by the three brothers Le Nain (Louis, Antoine, Mathieu) at the Knoedler Galleries, New York—November 23-December 12; then to be shown in the Wadsworth Atheneum, Hartford; the Art Institute of Chicago; the Detroit Institute of Arts; and the City Art Museum of St. Louis. The exhibition was arranged by Louis Carre in Paris and includes five paintings loaned by the Louvre Museum, Paris; one by the Kaiser Friedrich, Berlin; one from the Rijksmuseum, Amsterdam; one from the Rennes Museum; several from private European collections, beside several from museums in this country. This is the first exhibition of the work of the brothers Le Nain to be seen in this country.





This painting is one of those included in the circulating exhibition of the works of the brothers Le Nain, scheduled as follows:

1936 Nov. 23—Dec. 12
Knoedler Galleries, New York

1936 Dec. 21—Jan. 24
Art Institute of Chicago

1937 Feb. 1—Feb. 21
Detroit Institute of Arts

1937 Mar. 1—Mar. 21
City Art Museum, St. Louis

MAGIC SYLLABLES

WHAT PART DOES THE TITLE PLAY IN DETERMINING A BOOK'S SALE?

SOLOMON said: "A good name is better than precious ointment." Apparently that is equally true of field marshals, cigarettes, perfumes, subdivisions and novels. The business man soon learns that the choice of a label for a commodity is just as important as the quality of the commodity itself, and literary history suggests that quite often an apt title has quite as much to do with a fictional success as the timbre of the story.

Particularly in the crush and competition of modern times has the trick of the catch-line or slogan become invaluable in literature. And contrary to popular conception very often it is *not the author*, but the publisher who comes up with the nifty title that transforms a dud into a best-seller.

But what is a good title, a title pregnant with success? What is the secret of the magic syllables? As in the commercial world, there is nothing so conducive to the impression made by a book on the public consciousness as an aroma of sexual or economic success in a title. Thus *The Scarlet Letter* frequently is cited as the No. 1 American title, the book also satisfying as it does Guiterman's dictum that "the novel that is great is melancholy."

E. Haldemann-Julius in his Little Blue Books found that *A Book of Comic Poems* was twice as good a seller as *A Book of Humorous Verse*, indicating that the public likes slapstick and simplicity. Although Greek and Roman dramas were hard to sell, *The Bacchantes* of Euripides sold 12,000 annually because "its title implies joyous dancers." Thus the right kind of title can be relied on to trick tabloid intelligence into buying a Harvard classic. Anyway, Literature is not what is found in libraries, but what people read.

History seems to indicate that the titles that last longest have simplicity, which is in accord with Proust, whose phobia was "the precise term, the unique and exact expression," and who liked a title to be "quite simple, quite colorless." He had himself at least three excellent titles—*Remembrance of Things Past*, which included *Within a Budding Grove*, and *Cities of the Plain*, which was also called *Sodom and Gomorrah*.

The Sales Value of a book title has been mostly a modern development, although it was during the Victorian period that the title began to crystallize. The Hebrews in Old Testament times found their titles in the first words they wrote. Thus the first book of the Bible is called in Hebrew "Bereshith," which is the first Hebrew word of the Bible and which means "in the beginning."

From the first word titles, the next extreme was too long, symbolical and involved titles. Thus during the vogue of long titles, in 1626 a book came out under the following title: *A Reaping Hook Well Tempered, for the Stubborn Ears of the Coming Crop, or Biscuits Baked in the Oven of Charity, Carefully Concerned for the Chickens of the Church, The Sparrows of the Spirit, and the Sweet Swallows of Salvation.*

One of the chief characteristics of the Elizabethan period was the exuberance of its authors, and presently an intelligent development of titles for novels was under way. First use of quotations as titles is credited to William Gifford in the Eighteenth Century, but the vogue for quotation titles was established by Thackeray with his *Vanity Fair* taken from *Pilgrim's Progress.* Thackeray, it seems, like most authors had difficulty with his titles. Once, worn out by the strain of seeking for his title, he dozed off to sleep. Suddenly he awoke and shouted: "I have it—Vanity Fair!" The title had come to him in his sleep, just as Stevenson says he dreamed first the story of *Dr. Jekyll and Mr. Hyde.*

Dickens said that the three principal difficulties of writing were: 1. Getting a good start; 2. Writing the final paragraph; 3. Finding a title. Usually after trying for days and weeks to find a title, he gave up and used the name of one of the characters. *Our Mutual Friend* and *Bleak House* were about as far as his imagination carried him.

While most authors have suffered in straining for titles, Shakespeare was prodigal with them. He sprinkled them all around, and his fecundity is proved by the fact that more than 500 books have been named from his phrases, *Hamlet* leading with more than a hundred. The first title taken from Shakespeare is supposed to be Leigh Hunt's *Table Talk.* William Dean Howells alone wrote thirteen books on Shakespearian titles, while Hawthorne's *Twice Told Tales,* and Charles Kingsley's *Westward Ho!* were early selections from the Bard of Avon. From ten lines alone in Act V, Scene 14 of *Macbeth,* no fewer than nine titles have been taken just since the World War.

No stronger evidence of the efficacy of a title is available than the vagaries of Stevenson's *Treasure Island.* When first published as a serial in the magazine *Young Folks* starting in October, 1881 under the title of *The Sea Cook* and over the by-line of the *nom de plume* "Captain George North" it "attracted not the least attention," according to Stevenson. But when it was published two years later in book form under the title of *Treasure Island*, this title being the suggestion of Mr. Henderson, editor of *Young Folks* (the full original title had been *The Sea Cook* or *Treasure Island*), it became an instant success and brought Stevenson his "first breath of popular applause."

Next to *Treasure Island*, one of the most memorable and successful of the changed titles was *When Knighthood Was in Flower*. Charles Major wanted to call his book *Edward Caskoden*, but Bobbs-Merrill changed the title to *When Knighthood Was in Flower*, and it is generally accepted that the selection of the latter title had a tremendous effect on the sale of the book.

The Marble Faun was not the original title of Nathaniel Hawthorne's popular short story. The original title was *Transformation: or, the Romance of Monte Beni*. *Little Women Wedded* was the original title of Louisa May Alcott's *Little Women*. *The Three Guardsmen* were the originals of Alexandre Dumas' *The Three Musketeers*. *Tom Brown's School Days* by Thomas Hughes appeared also under the title of *School Days at Rugby*. Alphonse Daudet's *New Don Quixote* became *Tartarin of Tarascon*.

Oliver La Farge's Pulitzer Prize Novel, *Laughing Boy*, originally was entitled, *Hunger People*, but Houghton Mifflin changed it for fear of confusion in fact, or in idea, with Paul De Kruif's *Hunger Fighters*, which was then a best-seller. *Hunger Fighters* itself was originally called *The Romance of Microbes*.

The perfect modern title *Bad Girl* was also a publisher's contribution. The book came in to the accepting publishers, after being rejected by Simon and Schuster, christened *Nine Lunar Months*, and Harrison Smith is supposed to have made the suggestion of the very valuable change.

Frank Swinnerton submitted one of his most famous books under the title of *In the Night*. Doubleday, Doran changed the title to *Nocturne*, which undoubtedly was at least partially responsible for the excellent sales the book received. Dutton's changed the title of Ethel Boileau's *Turnip Tops* to *A Gay Family*, and the result was an outstanding best-seller, although the author was never convinced that the title should have been changed. Vardis Fisher was equally dissatisfied when Houghton Mifflin changed the title of his first published novel from *A Shepherd of Dreams* to *Toilers of the Hills*. His second novel was called *Those Strange Bridwells*, but again the publisher objected, and after threshing the matter out he offered *Dark Bridwell*, which was accepted. The titles of his tetralogy have stood, although Boriswood of England changed the title *In Tragic Life*, which they regarded as intolerably gloomy, to *I See No Sin*.

Chance holds its sway in book titles as well as in the play of the infinitesimal atoms. When A. P. Herbert was doing his novel of the English divorce problem he suggested dozens to the publisher and neither he nor they were satisfied with any of them. Finally one morning he called up and said that he had decided that the best he could do was *Holy Wedlock*. The publisher misunderstood him over the phone and thought he said *Holy Deadlock*, which he said was a marvellous title, which it is. The book sold terrifically in England and also in the United States.

Barrett's first novel, a study of a girl whose marriage was doomed to tragedy, was first called *Immolation*. But Liveright insisted on *Rapture*. He was going in strongly for ironic titles at the time. Lawrence Stallings remarked one day, "If Liveright had *Bleak House* on his list this season, he'd probably publish it under the name of *Cheerio Mansion!*" *Rapture* sold successfully, but unfortunately, just as a movie sale was impending, Will Hays stepped in and turned it down flat on account of its "suggestive title."

Jack Woodford reports that "practically all the titles to practically all my novels have been changed by every publisher I ever dealt with. The one title I put on a novel without any argument from anybody was the title *City Limits*. That novel turned out to be my best seller and sold to the movies finally."

Alec Waugh's *Hot Countries* was a new title selected by Stanley Rinehart of Farrar and Rinehart, the publishers of the book. Sinclair Lewis' original title for the unapproachable *Main Street* was *The Village Virus*.

Lewis had been building *Main Street* for years, but the book was entered under contract under the ultimate name. *Dodsworth*, however, was thought of variously as *Dusk*, *Twilight*, *Evening*, and *Blind Giant* before a triumphant *Dodsworth* superceded them.

Under the head of two-time titles comes also the matter of different books being published under the same title. Frequently there are arguments or threatened law suits over usurped titles, but apparently nothing can be done about it since the copyright law "contains no provisions under which the title, as such, of any literary, musical, dramatic, or artistic production can be registered in the Copyright Office to secure monopoly in the use of the title."

One of Arnold Bennett's best and best-known novels was *The Old Wives' Tale*, a title derived from the Bible (1 Timothy 4:7). It is not so well known that George Peele had used the same title years before.

Sanctuary was Edith Wharton's story of mother love in 1904, and a story of something quite else by William Faulkner in 1931. R. C. Sherriff's famous war story *Journey's End* was a title used previously by Justin Miles Forman, the phrase coming from *Twelfth Night*—"Journey's end in lovers' meeting."

The Golden Fleece is one of the most worn titles. Julian Hawthorne wrote a novel with that name in 1892, and books have come out under that title since in the following order: James Baldwin (1905); Guy Wilfrid Morris (1922); James Robinson Planche (play); Padraic Colum (1921); and John Gunther (1929).

French Leave has done almost as much overtime, serving as title for a book by Jeanette Philips Gibbs, and also for one by E. A. Somerville and Martin Ross, besides E. V. Lucas' *French Leaves*.

Recently the Federal Trade Commission has ruled against the publication of any book under a substantially different title from the one under which it was previously published somewhere else, so there will be fewer changed titles in the future. It has frequently seemed desirable to American publishers to change the titles of books by English writers. Occasionally the original title was too definitely English, as for instance Sheila Kaye-Smithe's *Little England*, which was changed to *The Four Roads*, and Eden Phillpott's *The Marylebone Miser*, which was changed to *Jig-saw*. Neil M. Gunn's *Butcher's Broom* became *Highland Night* over here, and back in 1920 Sir Phil Gibbs' *Now It Can Be Told* was an improvement on *Realities of War*. Stella Benson's *Tobit Transplanted* was changed to *The Far-Away Bride*, and Gilbert Cannan's *Three Sons and a Mother* became *Three Pretty Men*. Margaret Irwin's *Still She Wished for Company* eventually became *Who Will Remember?* and Dorothy L. Sayers' *The Five Red Herrings* was sidetracked and finally became *Suspicious Characters*.

Of course no publisher could possibly tell whether or not a title which had been changed was beneficial to the sale of the book or not. It could be only opinion. There is no way of knowing what the sale would have been with the other title. When Dutton's published *The Four Horsemen of the Apocalypse*, which was one of the best-sellers of the last twenty years, the booksellers told them in no uncertain terms that they couldn't have found a more unsuitable title. In fact, they were so sure that the book would not sell with this title that despite all the pressure the publisher could bring to bear, the advance sale for the entire country was only 176 copies. And yet the book sold 385,000 copies the first year of publication.

As John Macrae, Jr., vice president of E. P. Dutton & Company, says, "It is usually impossible to find out from readers why they read, why they liked or why they didn't like a certain book. Personal taste is a curious thing. Experience, intuition and common sense are extremely important when trying to figure out such things. When a book sells, you never know why, and when it doesn't sell, there are always any number of good reasons why it didn't. The reasons why one book didn't sell, however, are often the reasons put forth why another one did. If any publisher could find the man or woman who could tell him with any degree of accuracy what books to publish, what books not to publish, what titles to use and what titles not to use, that man or woman could name his or her own salary."

Lewis Browne's history of Christianity, *Since Calvary*, was originally entitled, *For Christ's Sake*. The publishers questioned the discretion of using that original title. Similarly *Stranger Than Fiction* was first called *The Story of the Jews*, and was printed under that title in England. "I've had good luck with certain titles," he explains, "as evidenced by the imitation. *This Believing World* was followed by a flood of 'This Economic (Bewildered, Thinking, Friendly, etc.) Worlds.' And *That Man Heine* was likewise followed by a flood of *That Man Dawes*, etc. I thought of calling my recent novel (*All Things Are Possible*) *The Other Mary*. Thus I would have been able to speak of myself as the author of 'This, That and the other!' But I resisted the temptation."

O. E. Rolvaag's famous novel *Giants in the Earth* was changed by Harper's from *In Those Days*. The same firm also rechristened Roark Bradford's *Ol' Man Adam an' His Chillun*, from which the play *Green Pastures* was taken. The original title was *The First Book of Ethiopus*. Ludwig Lewisohn's *The Island Within* was first called *The Defeated*. Martin Hare's *The Enchanted Winter* was called *Butler's Gift* in England, and his first title for American publication was *Winter Abroad*.

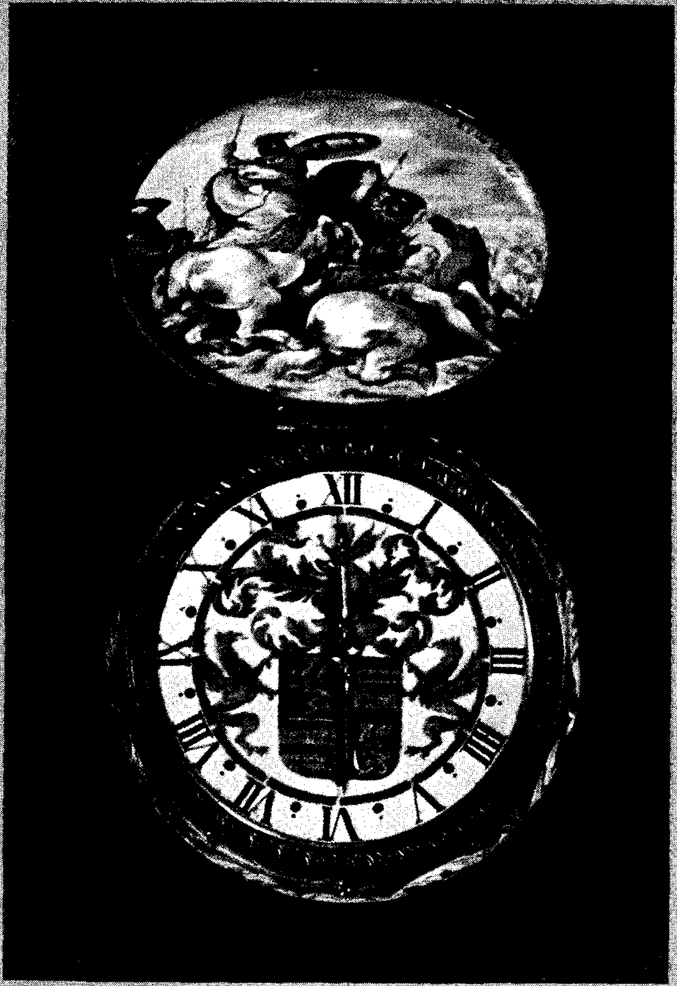
The title of Louis Bromfield's first success, *The Green Bay Tree*, was chosen by Emily Street, publicity director for the publisher. "I had no title until the book was actually on the press," he relates, "and we were desperate when Miss Street suddenly brought *The Green Bay Tree* out of her hat and saved the day.

"It was Mrs. Wolfe, daughter of Walter Damrosch, who gave me the title for a collection of short stories called *Awake and Rehearse*. We were on a Spanish beach near San Sebastian (in happier days) when I told her that I meant to publish a book of thirteen short stories all about deaths and funerals, and she said at once: 'Why not call it *Awake and Rehearse?*' The title sounded biblical to me—like one of the more nonsensical portions of the Book of Revelations. Not until two years later after the book had been published did I realize that I had been the victim of a simple pun containing the words wake and hearse.

"The title *A Good Woman* brought me a huge crop of abusive letters from middle-aged women and powerful mothers who felt that the irony of the title struck too near home. I was accused of every crime from rape and lechery to being the Anti-Christ.

"*The Strange Case of Miss Annie Spragg* brought about an unfortunate deception with many book buyers who thought they were buying a murder mystery. It did, however, please some of them and brought me new readers whom otherwise I should never have reached." —Ralph Cannon

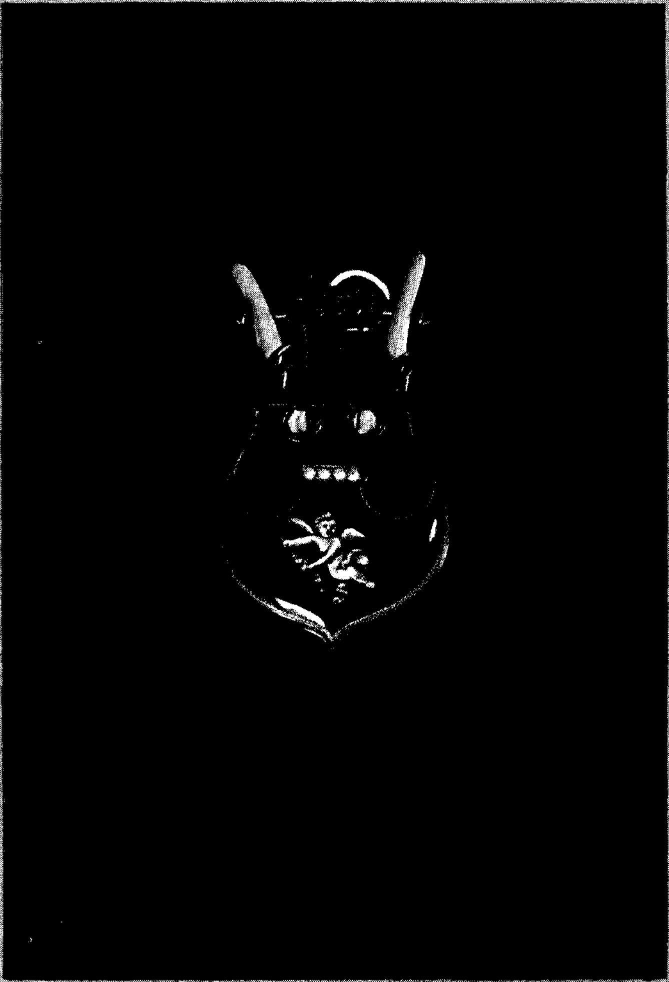
Ball shaped repeater watch of gold decorated with enamel, made about 1740, the movement signed by Julien Le Roy, a celebrated maker credited with many innovations in the development of the watch. His son Pierre after him became the most eminent horologist of France.



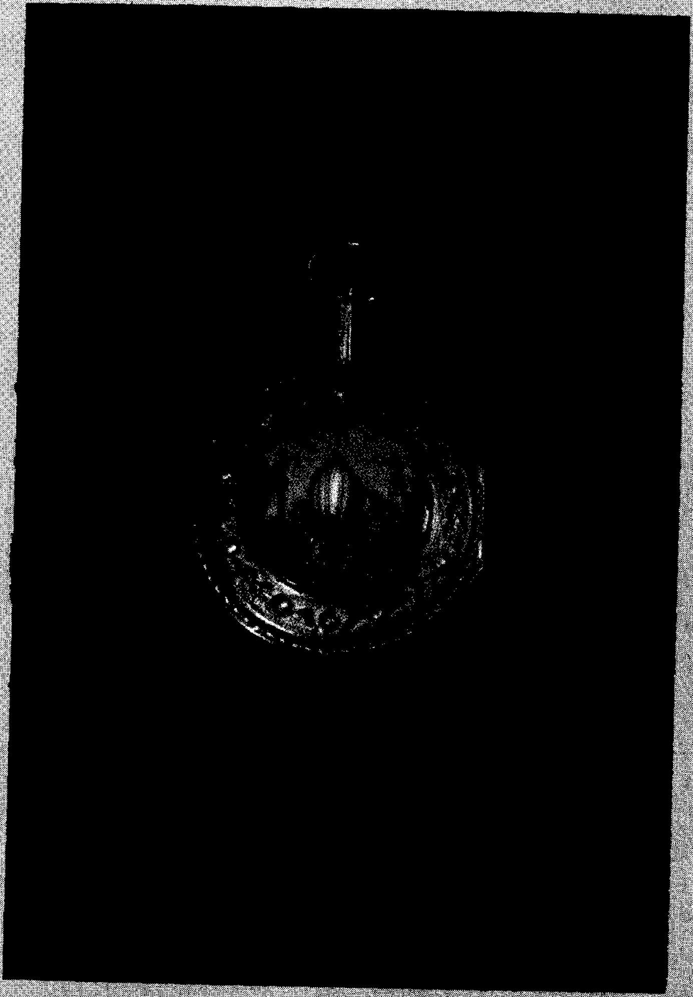
An English watch of about 1746 when it was written by an authority that "the English are the best of all, then come the French, the Augsburg, Nuremberg and Ulm watches. The Geneva watches are thought little of; they are made in such quantities one buys them in lots."

Enameled watch made about 1750 by Charles Cabrier of London. By 1750 the Cabrier watches were the work of the third and most famous of the bearers of the name Charles Cabrier. Son of Charles, he was the grandson of that Charles who became a mastermaker in London in 1697.

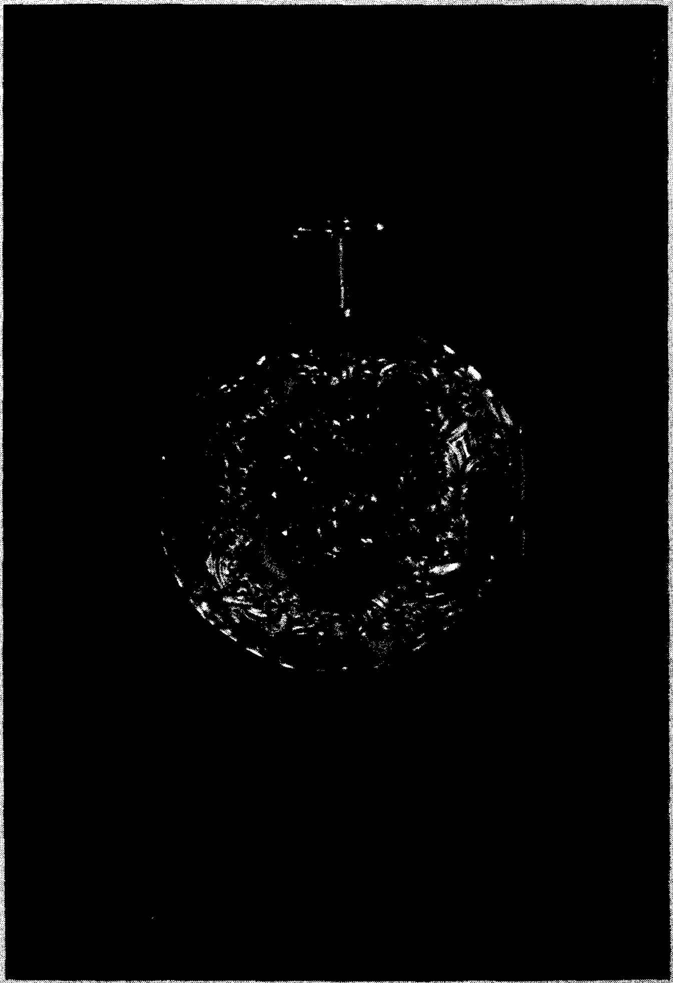
An egg shaped watch, circa 1760, of silver enamel and brass, the traditional Nuremberg shape suggesting probable South German or Swiss origin. Watchmaking began in Nuremberg, then spread to Augsburg, Paris, Blois, and Rouen, in that order, before it began in Switzerland.



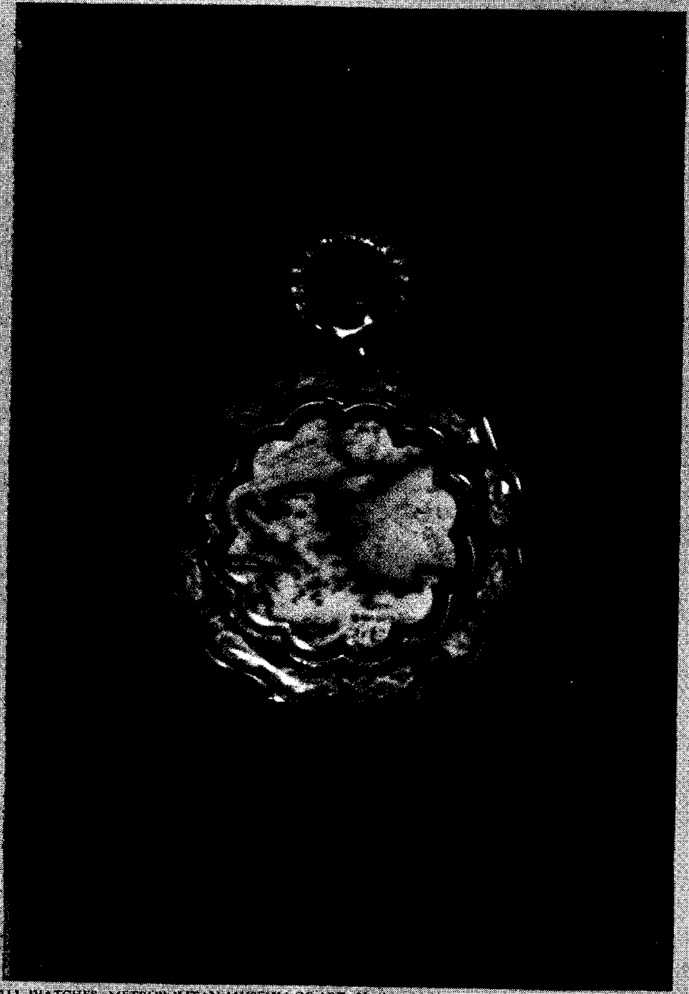
Watch of gold enamel and jewels, in the shape of a lyre, made in Vienna about 1770 by Michael Ranna. Quaint-shaped watches of so late a date are rare, although those made in the semblance of other objects were most common in the earliest period of watch manufacture.



One of twelve watches made in 1783 by D. Vauchy of Paris commemorating the ascension of the *first* Montgolfier balloon. Only this and one other have survived. Daniel Vauchez (the name was variously spelled) was one of the most eminent makers; watches in most of the museums.



Agate chatelaine watch with overlaid gold filigree, the movement signed Perigal, 1785. The name Perigal was famous among London watchmakers, as there were, in direct line, fathers and sons, four makers named Francis Perigal. The chatelaine attachment is not shown.



ALL WATCHES, METROPOLITAN MUSEUM OF ART, N. Y.

A nineteenth century watch, enamel map back, the movement signed Breguet à Paris. A link with the present, for the firm of Breguet et fils was founded in 1816 by Abraham-Louis Breguet, who was the last of the great artist-craftsmen, and it has continued to the present period.

A COWBOY'S HOLIDAY

WHAT WOULD A COWBOY DO ON A DAY WHEN HIS WORK'S ALL DONE?

DAN hardly knew what a holiday was. And yet he had many of them. He had them without knowing it. For instance, he would saddle up and start out with the sun for the day's ride as usual.

First thing: he was going to cut across the ridges and look for that old bob-tail cow that had fallen into the bottom of the bedrock wash in Sycamore Canyon and got wedged there till she nearly starved. Her calf had almost died too. He would try to get them down to the little meadow below Dripping Spring. They'd *make* it, if he could get them there.

Next: he was going to work out the head of Buckhorn and see about that place in the drift fence where Juan had said some cattle had gone through. He wanted to be sure that Jaqui had fixed it and that no more stock had gone out.

Then: he would drop over the divide and cut for tracks on the bunch that had crossed there. He knew which one it was, from what Juan had said and because he had missed them from their usual range. It was the one with that old droop-horn white-face cow with the little bull calf and those two red heifers. If he found them nearer than Wildcat Creek, he'd be lucky and if he got them back through the drift fence before dark he'd be luckier still.

Well, if he *did* get these things done and had any time left, he would come back by Lone Tree and see how the feed was holding out for those yearlings. They would have to look good to some buyer in another month and to do this they might have to be moved.

So Dan had a mighty full day lined out when he left camp this morning. But, as it sometimes happened, luck broke for him from the first. Sharkey, the horse Dan was riding this day, was one that needed long hard rides and often delayed the morning's start by demanding a lengthy review of some lessons he should have learned long before. This morning Sharkey's behavior was flawless. This in itself was enough to start the day right for Dan.

Then before he had even begun to hunt for the weak cow and calf he came upon them exactly where he wanted them—feeding on the Dripping Spring meadow. And they had picked up so much it made Dan feel good just to see them. The calf was actually playing around its mother. She was giving plenty of milk again and growing strong to boot.

On top of the divide Dan found the drift fence all fixed up and saw that the only tracks going through the break had been made by one small bunch, as Juan had said. Further, when he came to the saddle where Juan had thrown the gate open temporarily in case those cattle should drift back, there were their tracks coming back through.

This was more luck than any cowboy was entitled to in one day, Dan grinned. Yet there was more to come. He put up the wire gate and followed the tracks of the cattle that had strayed. They had gone along the top of the divide in the direction he wanted to ride anyway and he soon overtook them, identified them at a glance and gave them a shove down the slope to speed them back where they belonged.

Now he could cut straight over to Lone Tree Flat and see about those yearlings. Here again he found things exactly to his liking. The feed was holding out fine. The yearlings were looking good. Most of them were running in Tres Alamos Draw and the gramma there was like hay in a manger.

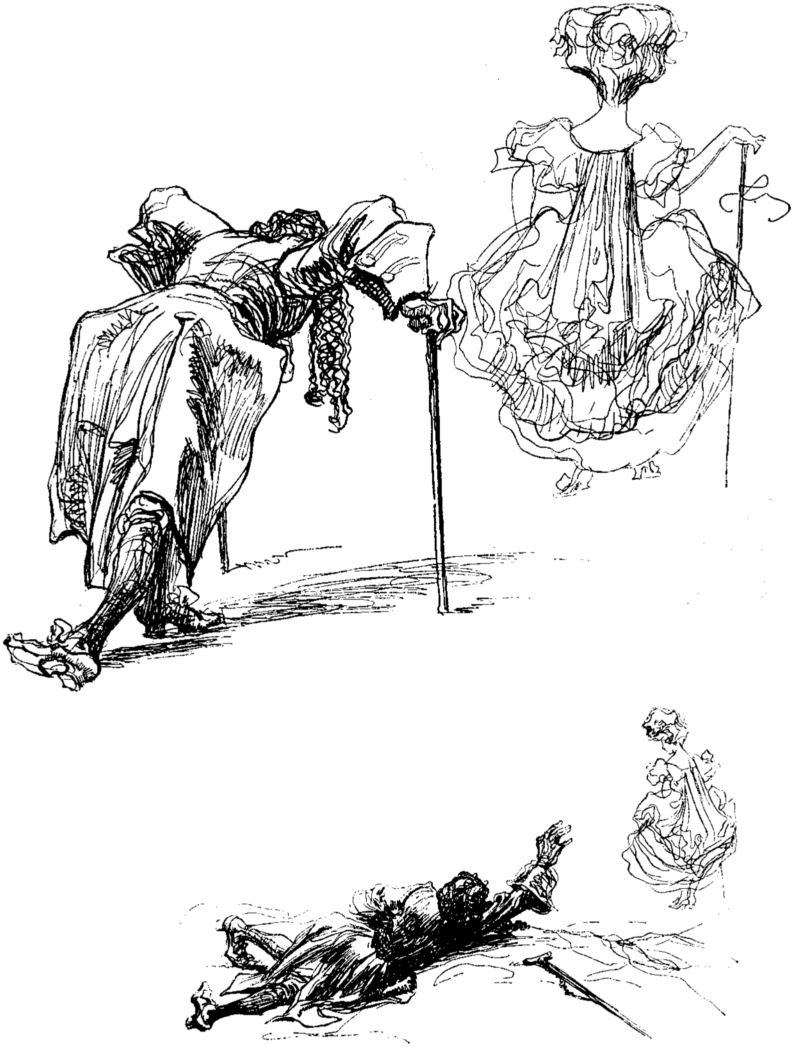
It wasn't past ten o'clock. Yet Dan had accomplished what might easily, with the wrong kind of luck, have dragged out into three days of riding.

Well, here he was, working back toward Dripping Spring with the day's plans all carried out. There really wasn't a thing pressing. The next move in his program was a long day's ride to Bear Track Basin to see how the water was holding out there and to do a little range branding. There were a few late calves over there that ought to be branded before they got any bigger—before some of those nesters took it on themselves to wean 'em. But it was too late now for that ride today.

His horses were all shod up; his rigging was in good shape; there was plenty of wood in camp; he had, in a burst of energy, washed up all his dirty shirts, socks and Levis the evening before.

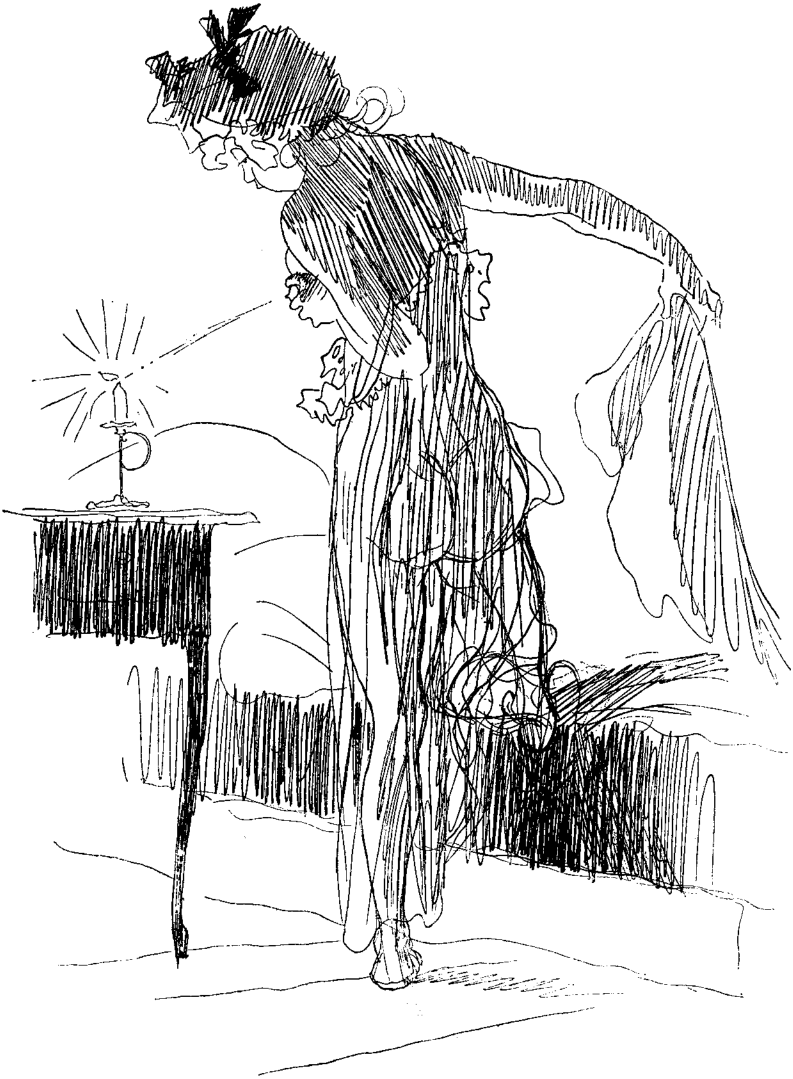
Well, there just wasn't anything to do.

Of course, he might take a *pasear* over through the big horse pasture and see how that bald-face black colt of his was growing—the little rascal; he sure was getting frisky; a couple more months and he would be catching that little fellow up and fooling with him, letting him learn the feel of a man's hand on his withers, and a halter on his pretty little head; picking up his feet without tying one of them off the ground. But shucks, he knew that colt was all right. He and his mother were both fat as seals and there wasn't a loose strand of barbwire anywhere in *that* pasture to cut a colt. Dan had seen to that long ago.



HEINRICH KLEY

A LOVE STORY



HEINRICH KLEY

NIGHT

By golly, it was good to get the breaks this way once in a while. He'd just stop for a smoke under the live oaks here by Dripping Spring and think it over for a spell.

The sun was warm enough this morning to make the little breeze drifting up the draws feel fresh around the edges of his hair when he tipped his big hat back. Maybe it was the extra moisture in the air there around the little meadow that made his tobacco taste sweeter than usual. He had often noticed how good a smoke tasted when it was raining in this dry hot southern country. He thought the best smoke was when he stopped during a summer shower under some shelter like the open-mouthed cave in Bass Canyon, or the old blacksmith shed at the abandoned camp on White Horse Creek, or here under these thick live oaks at Dripping Spring. Mostly his tobacco was too dry in this country anyway. A cigarette rolled better when it was raining—if he kept his hands and papers dry.

Sitting on the ground with his back against a tree, Dan had smoked half a cigarette when his ear caught the hoarse notes of a wild burro from up on the mesa above the meadow. The sound came faintly from far back on that high flat.

Dan was on his feet in an instant and as quickly in the saddle again riding for the steep bank that rose to the mesa. He put his horse up it at an easy grade and pulled him in just as his own eyes were high enough to see over the bank. He had taken off his hat, so that practically no part of him showed from above except perhaps a wisp of his foretop, which might have been so much dead grass. Those wild burros were a spooky lot.

There they were! Coming down out of the hills on the other side. One had got too far ahead. He must be *dry*. He had stopped to call back to the others. Telling them to come on, Dan supposed. Now the others were catching up with him. Yes, they were coming to water. They were bucking and playing as they dropped off the steep ridge onto the level of the mesa. Now they were lining out for the water.

Dan reined his horse back down the bank. He knew they hadn't seen him. He had thrown his cigarette into a wet spot crossing the meadow. He didn't think they could smell tobacco smoke in the air now. The breeze was in the right direction.

Dan needed a burro to pack salt on. He'd been meaning to get one at the first chance. But those burros were cagey. And fast. It took a darn good horse to overhaul one even on the flat and in rough country it was almost hopeless. They were generally in the rough country when Dan saw them too.

Well, this was one time when things broke right. His horse was fresh. He had plenty of time. But those burros—they could give you the slip so darned easy. Well, he'd have some fun anyway.

Dan was looking around for the right place to take his stand. He had already noticed that the last burro tracks around the water were several days old and he had been wondering, before he heard that faint hee-haw, if they had quit watering at Dripping Spring. They ought to be pretty dry —dry enough to take on a good fill of water—it had been mighty warm the last few days and the feed was all dry now. What a perfect chance to catch them water-logged! But where was he going to cache himself and his horse?

There was a patch of tall yuccas right where the burros would most likely pass as they went away again. But Dan was afraid they would smell him there on their way in. Well, he'd get behind those willows at the edge of the meadow. Maybe they'd stop to feed on the meadow awhile after drinking.

Dan rode behind the thickest of the willows, stepped off and tightened his cinches. Back in the saddle he shook out his loop, pulled his hat down tight and waited, bent low and watching through the leafy curtain of willow branches. He wasn't worried about his horse nickering to the burros. Sharkey never paid any attention to them. Some horses might. But Sharkey never did.

The way those donkeys had been coming—they ought to be showing up by now. Had they winded him, or something? They were sure spooky. But, shucks, the wind was from them to him and he hadn't let anything but the top of his head show above the bank. They'd be along directly.

Yep. Here they came. Nope. They must have stopped up there. He'd have sworn he heard their little hooves pounding up on the mesa. Yes, he *had* too. There was one. Right there on top of the bank. With those long ears held up so stiff and tight they almost touched each other at the tops. Listen to him whistle! And another blast from farther down—Oh, *there* he was! That big black fellow with his mealy nose—*he* was the one Dan wanted. That was the one he'd picked when he first saw this bunch three months ago.

Lord, he'd been waiting a long time for a chance like this! Well, just let him get within a throw of that black head with his loop spread on the breeze!

They were all up there now—standing at the edge of the mesa, looking down on the meadow, looking everywhere, testing the air with their noses. They had stopped their loud snorting blasts now. Yes, one was starting down. Now another. A third. Four, five, six head in all. One baby following its mammy. Cute little devil. How would it do for a pet? Shucks, no time to fool with it. But that big black one—why, he was big enough to pack a man! He'd pack four salt blocks all right enough. What's more: he'd fetch a fair price from some sheep outfit, if Dan ever wanted to sell him.

Well, they were all down now and making for the water under the bluffs where it dripped into clear pools with ferns and green moss all about. But they were still acting spooky. Dan was wondering if they had caught some hint of his presence. Then at last they were all drinking.

Dan caught himself grinning from ear to ear there behind his willow screen. But what cowboy wouldn't have been grinning? This was sport—his blood was tingling—he was holding his breath most of the time.

Dan was keeping his eye on the big black all the time now. He was watching its flanks swell with the load of water it was taking on. He hoped it would drink till it couldn't hold another drop. And it seemed that this was what it did too. He thought he'd never seen an animal drink so long. Finally it began to move from pool to pool. It had appropriated the biggest one at the outset. Now it was bullying the others away from theirs.

"So you're the boss of the works, are you?" Dan was saying. "Well, that's fine. I've got a good stout pack-saddle for you to take charge of."

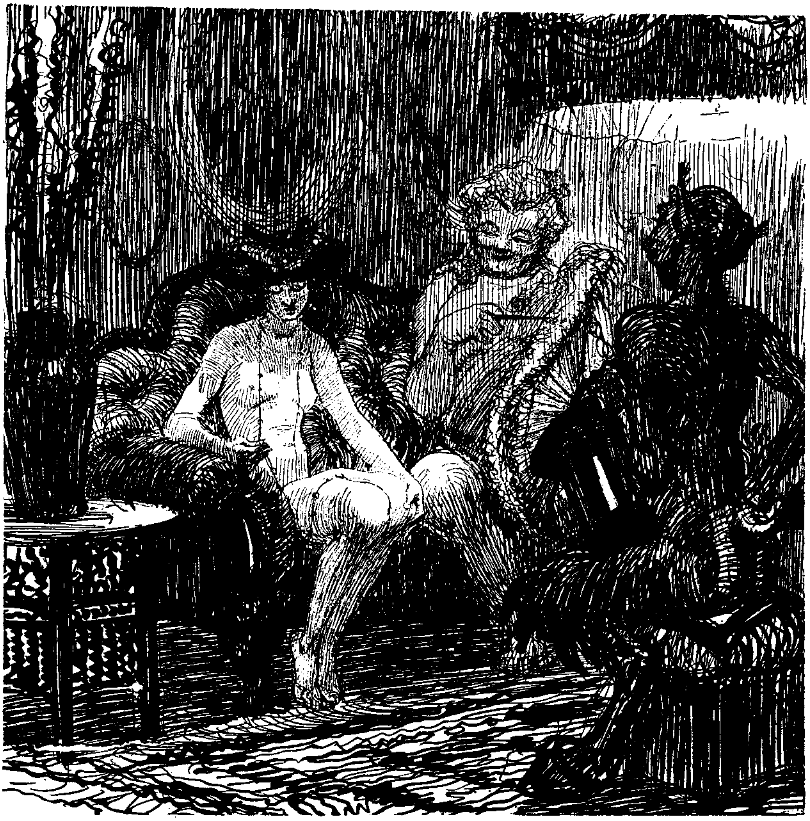
Dan was admiring the big black's withers. It had an exceptionally good back to hold a saddle. He wondered just how much fight it would put up after he caught it and through the breaking. It had plenty of spirit all right. You could see that. Well, that was all the better. It would make a first-class pack burro.

Now they were beginning to drift away from the water. One old one was standing back at the edge of the meadow half-asleep. The mother of the baby burro was waiting for it to finish taking its milk. Dan was watching the big black. It started away from the spring in the opposite direction from him. He began to cuss. It was going off around that clump of live oaks and there was that thick catclaw on one side and those big boulders in the way on the other. Oh-oh, no, it wasn't! It was just scratching its neck against a tree. Whew! What a relief!

The others had all worked out onto the little meadow, but too far from Dan's spot and going away from him. This didn't look so good. He wished something would turn them down his way. He wanted a fair chance for a catch before they hit off into the rough canyon below. If they got into that mesquite he was licked sure. He knew this was what they'd do. No chance of them crossing that open mesa again, once he showed up.

The big black was coming out again into the open. It was herding the bunch around. O-O-Oh! They were turning down the meadow—they were coming right by him!

By this time Dan's horse was ready to go. It was all nerved up from the times Dan had unconsciously gathered his reins and set himself for the charge. And it sensed the game. Dan's intensity and eagerness had got to Sharkey. Sharkey was on springs.



HEINRICH KLEY

THE AUCTIONEER

And NOW was the time. Dan set his sights on the big black and jumped Sharkey out. Dan almost whooped for joy. The whole bunch seemed paralyzed with the sudden grip of fear as the gray horse burst out of the willows. For a second they stood stock still with astonishment. Dan had hoped for this. But he knew it wouldn't last long.

And it didn't. Those burros scattered like quail. Each seemed to have a different idea about the shortest way to safety; or each wanted all the room it could get at the moment. Dan pointed Sharkey straight for the big black. And Sharkey quickly showed that he knew what he was after.

All the tenseness of that long wait behind the willows was let loose in the gray horse now. Sharkey was a good rope horse always, whatever his conduct might be on first mounting in the morning. Now he was a gray thunderbolt.

Halfway down the small meadow Sharkey's nose was within two lengths of the burro's tail. The burro carried its head high and half-cocked around as if it were looking backward with one eye and forward with the other. How it was getting over the ground!

Dan was gauging their separate speeds, meaning to make sure of his throw; leaning ahead, streamlining all he could, riding light on his stirrups, helping Sharkey.

With thirty yards of smooth ground left Sharkey had put him *up there.* Dan whipped his loop up right over the burro's heels. He was tempted to close in and fore-foot him. No, he wouldn't risk crippling that burro. He swung his loop—fast. He let it go.

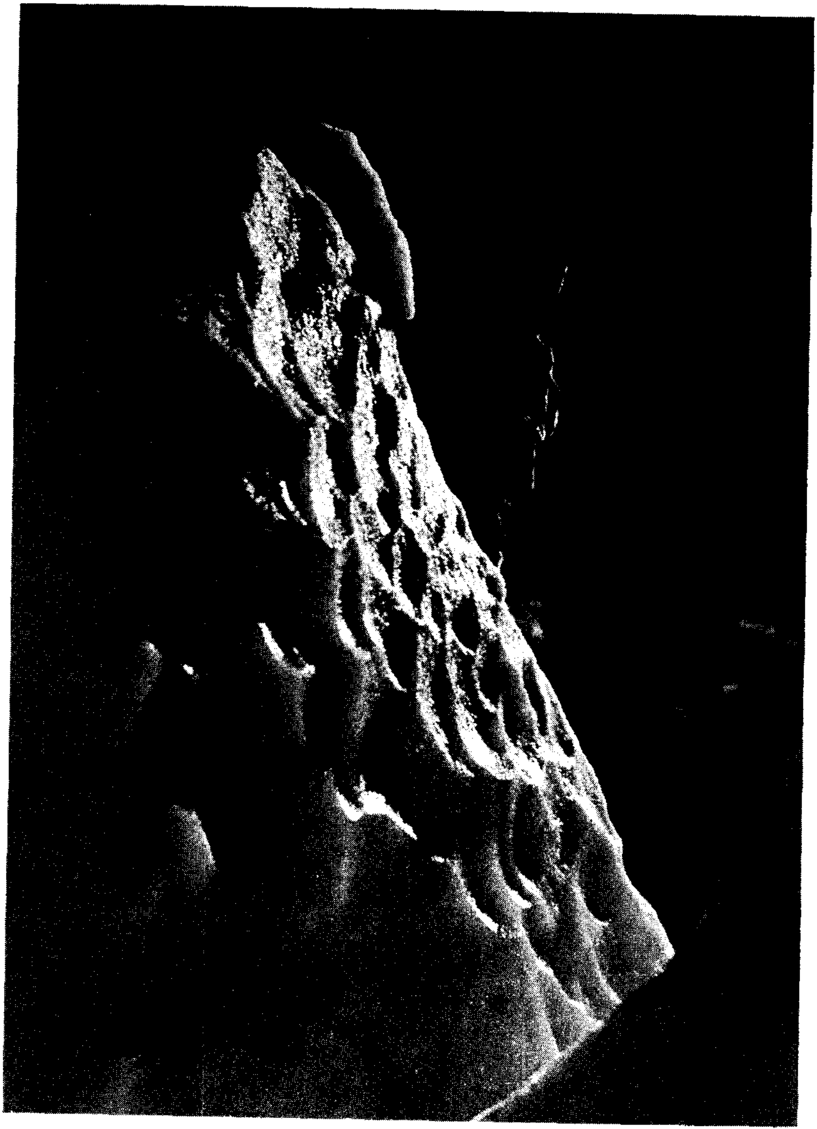
Dan's next motion was jerking in the slack, bringing the loop snug, just back of those long ears. Then he set Sharkey up. Sharkey tucked his hind feet under. He almost sat down. Whang! The burro hit the end of the rope. And with the shock he swapped ends, left the ground and came down flat with a thud.

The burro was up like a cat; fighting the rope; striking at it; squealing, bucking, tearing up the earth!

But that was all right—he'd be eating grain out of Dan's hand in a few days. Dan was sitting over in the saddle; taking it easy now; just resting his weight on one side against the rope strain. He was grinning clear around to the back of his neck. He was proud of Sharkey. He was pleased with himself. And he was tickled pink over his new pack burro.

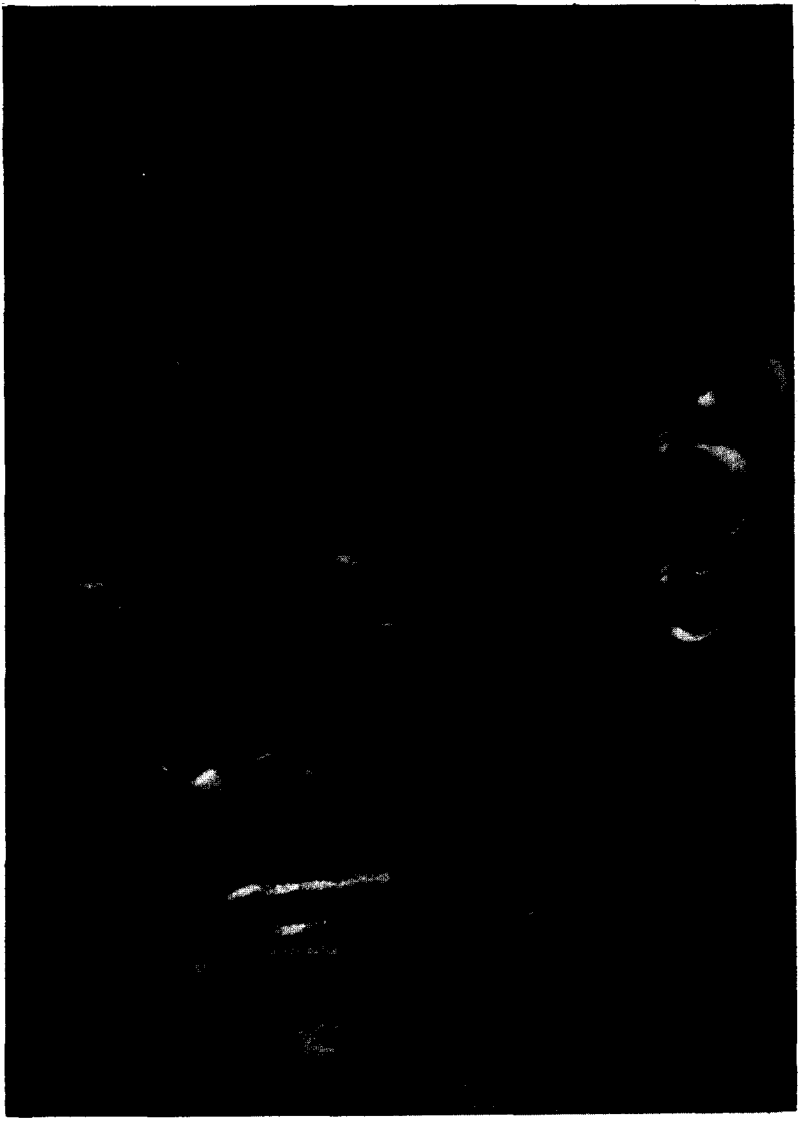
He didn't know *when* he'd had so much fun. You could have your deer hunting, or bird shooting, or trout fishing. And your games. Oh, they were all right. He could enjoy them too. But for the last word in sport with action, where you had to do some tall thinking to outwit the opponents, where they could be depended on to do their level best always, give him a good horse and a rope and some wild four-footed animal to catch. Yes, sir, he'd take his holidays this way every time.

—HENRY HARVEY



RAY ATKESON PORTLAND, ORE.

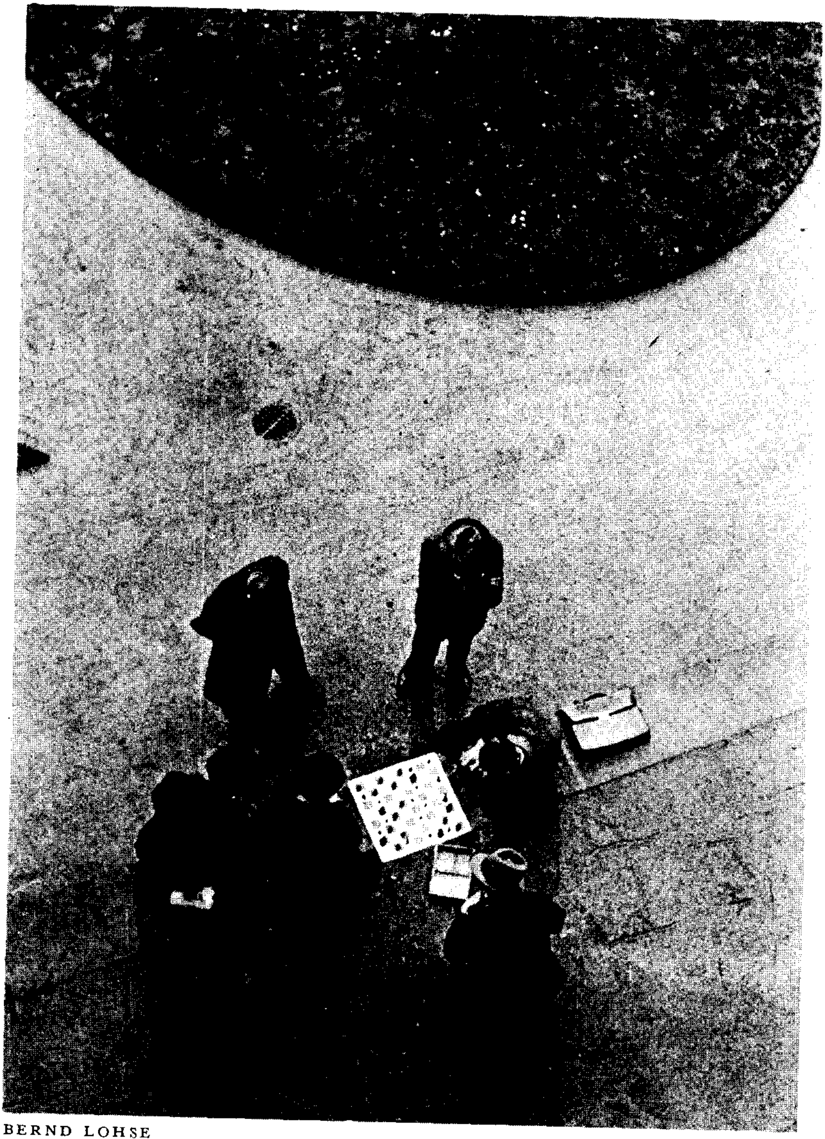
MT. HOOD



ROBERT L. MC FERRAN MINNEAPOLIS

FURY

JANUARY, 1937



BERND LOHSE

EUROPEAN PHOTO

SIDEWALK CHESS

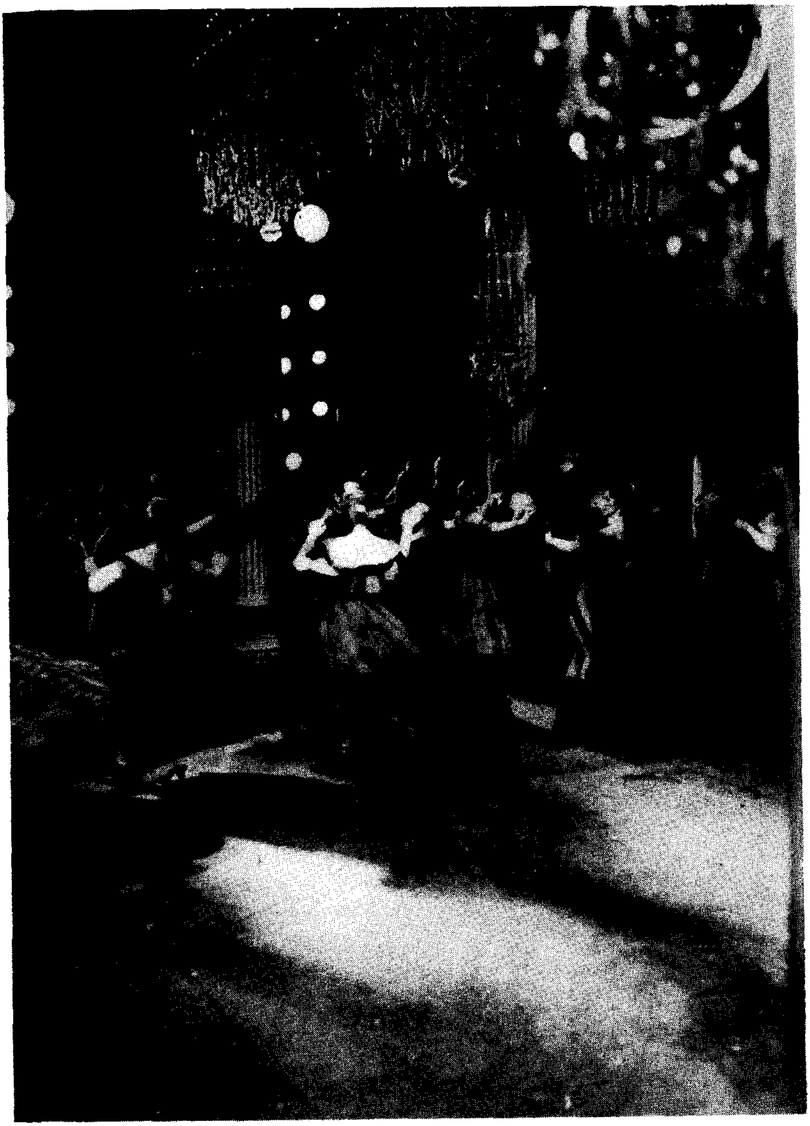
W. LUTHY BERNE, SWITZERLAND

EYES WEST

JANUARY, 1937

WESTELIN CHICAGO

CHORUS ROUTINE



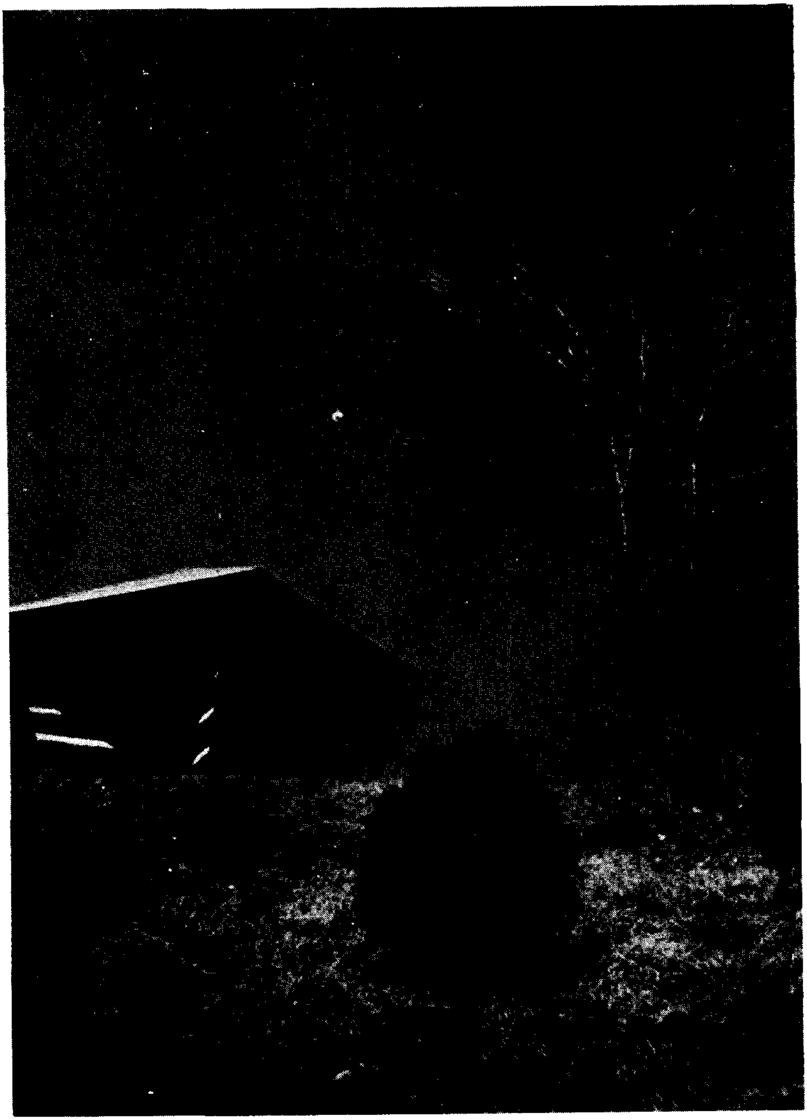
WESTELIN CHICAGO

THE GREAT WALTZ

JANUARY, 1937

DR. MICHAEL WISHENGRAD NEW YORK

CENTRAL PARK SILHOUETTE



DON WALLACE CHICAGO

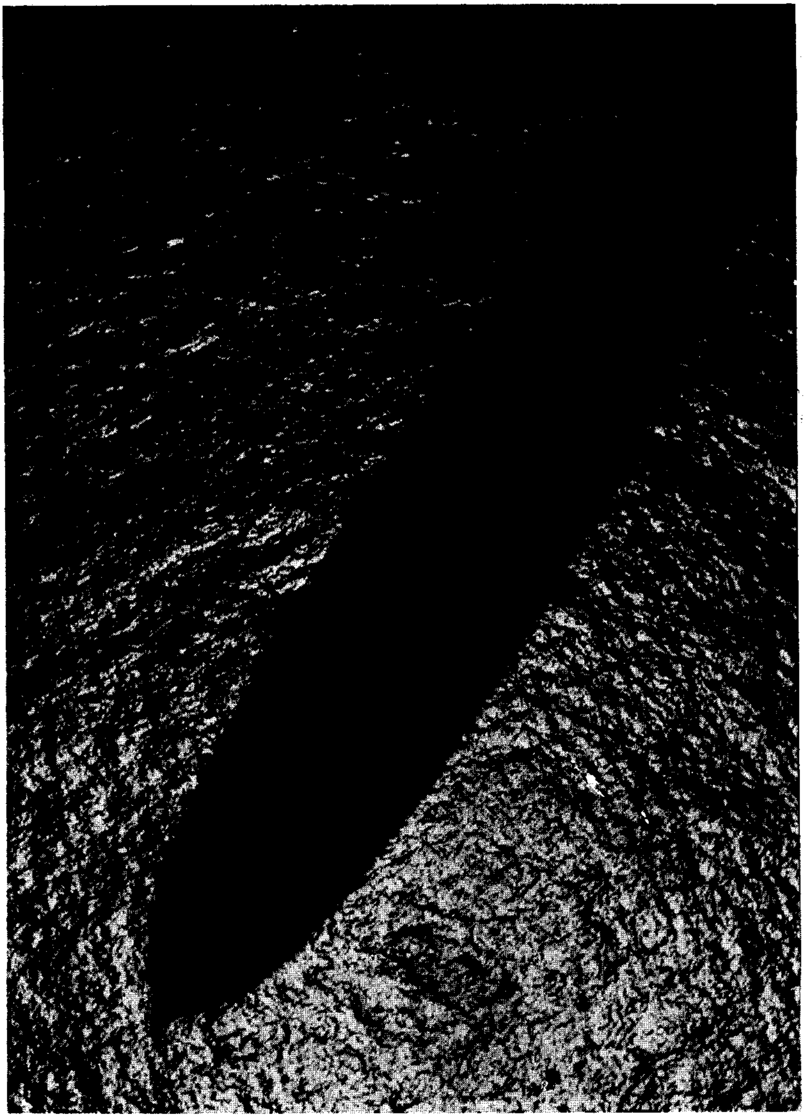
VESPER SKY

JANUARY, 1937

HANNS TSCHIRA

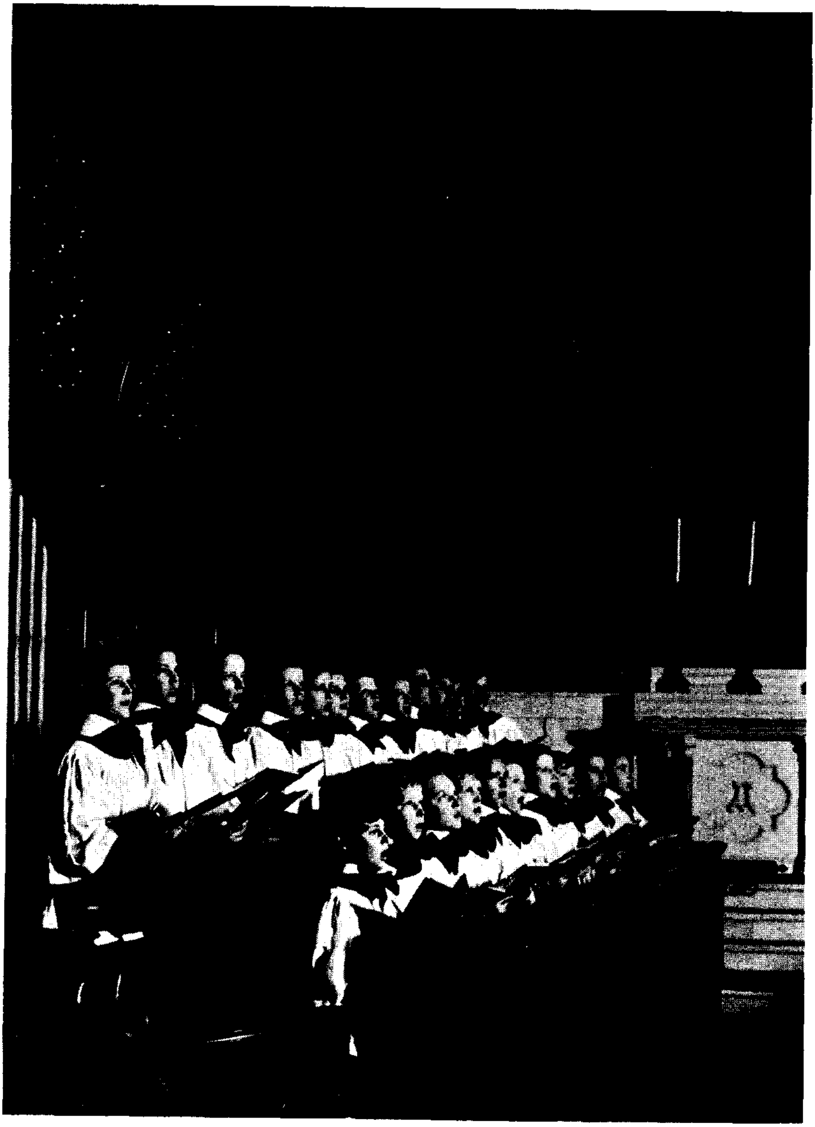
EUROPEAN PHOTO

THE OPEN OCEAN



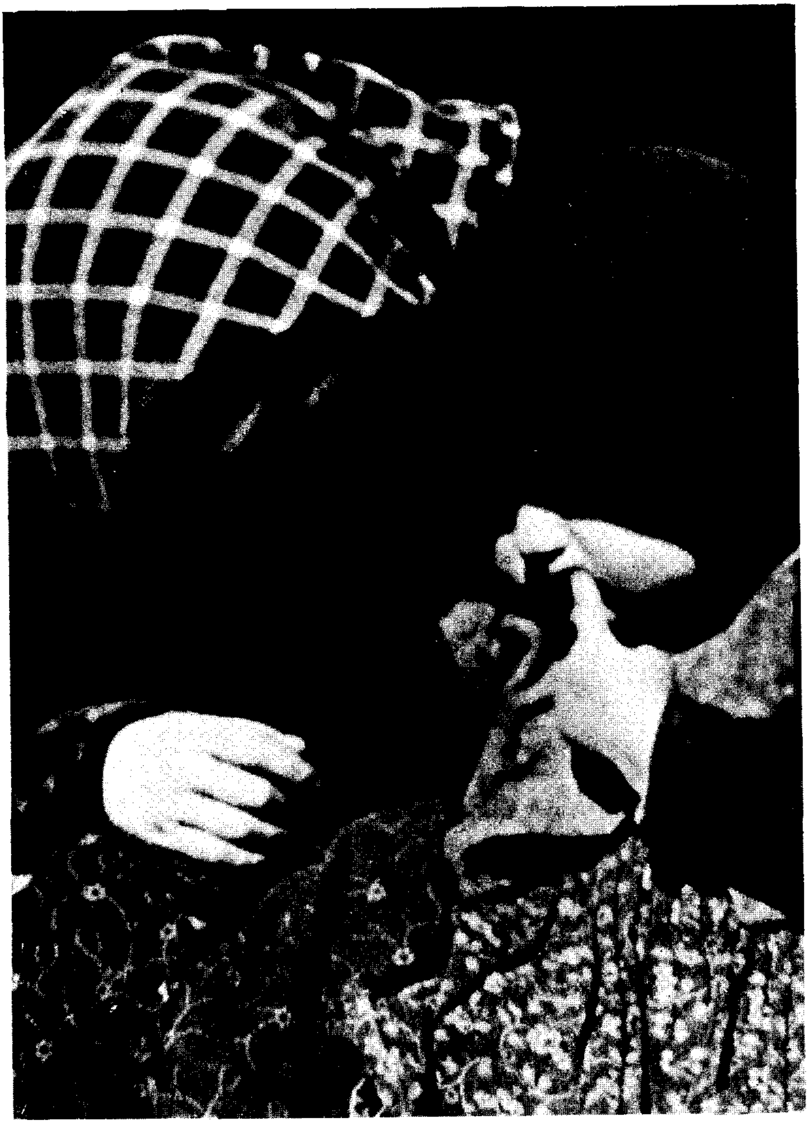
DR. PAUL WOLFF BLACK STAR PHOTO

HIGH NOON



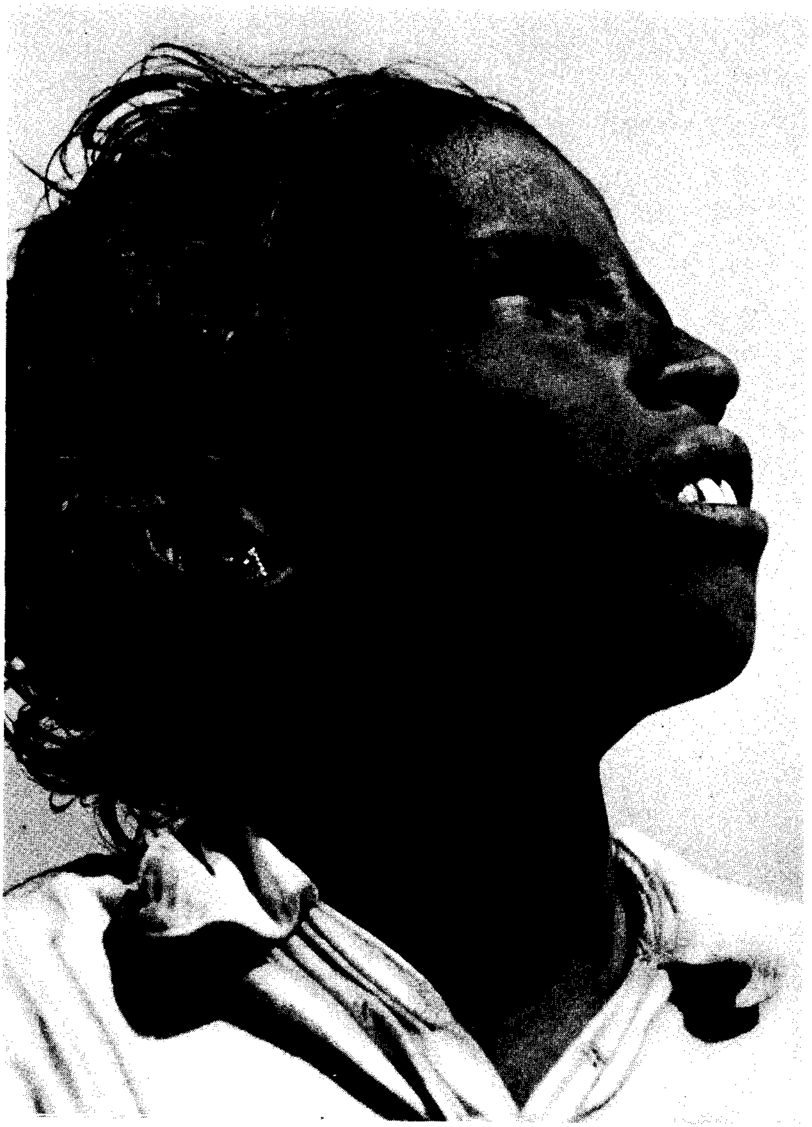
WESTELIN CHICAGO

SUNDAY MORNING CHERUBS



OTHMAR TATZEL CZECHOSLOVAKIA

WELTSCHMERZ



FRITZ HENLE

BLACK STAR PHOTO

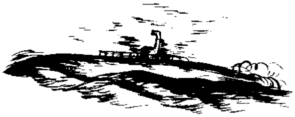
SON OF INDIA

FRITZ HENLE BLACK STAR PHOTO

DAUGHTER OF INDIA

THE FIRST SUBMARINES

YOU WOULD NEVER GUESS WHICH WAR SAW THEM FIRST PUT INTO ACTION



BEHIND the devising of the first submarines lies a story of unparalleled heroism where men willingly made themselves part of an offensive weapon, knowing themselves doomed to almost certain death, offering their lives for the slim chance that success would mean the destruction of superior hostile forces intent upon devastating their homes, strangling that hard won freedom which was the heritage of America.

It was in 1777 that the first submarine attack was launched. The Continental armies were in distress, lacking all the sinews of war; supplies, ammunition, morale were low. The British fleet had bottled up New York harbor. The stench of British prison hell-ships where captured American soldiers starved and died and rotted in the blackness of moldy hulks hung over the waters like a miasma. The spark of Liberty was barely smouldering in a land where hope was almost dead.

And then came David Bushnell with his one-man submarine, the *Turtle*, to attack a British man-o'war, tradition says H. M. S. *Eagle*.

The *Turtle* was equipped with an auger to bore a hole in the enemy ship's bottom and a bomb, to be placed in the hole. A delayed firing device would enable the *Turtle* to scuttle away to safety before the explosion. But the nimble mind which conceived the details of the craft, including a radiant compass needle and points, and a depth gauge, rendered similarly visible in the dark by the use of phosphorescent material, did not provide a weapon powerful enough to destroy its adversary.

When the *Turtle* rose beneath the *Eagle*, the oaken hull of the Britisher proved too hard for the auger to penetrate and increased pressure caused the *Turtle* to sink a few dangerous inches. Finally the *Turtle*, setting free its bomb which exploded harmlessly, made its escape by a series of dives and the first submarine attack was history.

Then, as now, an attack from below the surface created fear amounting to terror. The British never forgot Bushnell. Better still, his exploit fanned the spark of hope in soldier hearts around many a Continental campfire.

Nearly a hundred years later, once again defenders in time of starkest need were to invoke submarine warfare against a strangling blockade by an enemy fleet!

By October, 1863, Charleston was slowly perishing under the effects of the Federal blockade. The lower part of the city was practically deserted. Fires caused by shells from the Federal batteries had swept sections of the town. Warehouses full of cotton had been destroyed, wharves were wrecked. Many of its inhabitants had gone as refugees to the upper part of the state. Commerce, except for the advent of an occasionally successful blockade runner, was at a standstill. The Emancipation Proclamation had freed the slaves. The death rattle of the doomed Confederacy was almost in its throat, only a year was to elapse until Sherman cut the South into separate parts and really ended all hope.

It was then, on the evening of October 6, 1863, that the second American submarine, really a semi-submersible, appropriately named the *Little David*, under the command of Lieut. W. T. Glassell, C. S. N., with a crew of three, set out to attack its Goliath, the Federal flagship, the *New Ironsides*.

The tiny vessel represented a new mode in naval design, one well calculated to compete with the equally novel monitor. It was an iron hulled, cigar shaped craft designed for speed with a minimum of visibility, running awash with only a low stack and a short deck a foot high above the water line. For better concealment its upper parts were painted a slate blue.

The *David* was armed with a spar torpedo made of a copper container holding 100 pounds of powder and fitted with sensitive percussion fuses. This was carried on a spar 30 feet long, which projected forward from the bow. While the ship was moving a contrivance raised this from the water and sustained it in the air to prevent involuntary discharge by striking a piece of driftwood.

With faint streaks of phosphorescent light breaking from her trim hull the *David* bore down upon her objective; 500 yards, 400 yards, 300 yards away the huge warship loomed. And then across the night a sharp hail rang out from the ship's watch. Glassell ignored the challenge, the command to halt, lowered his torpedo and steamed at full speed directly at the frigate. When the *David* was within forty yards the officer of the deck exposed himself and was instantly shot by the Confederate in pursuance of his plan to create disorder on the decks of the *Ironsides* and further his chances of escape.

Pandemonium broke out on the warship at this shot from the dark; Glassell signaled for his engines to stop and exploded the torpedo against the iron side of the flagship. Like a chip the *David* was violently tossed about by the force of the explosion. Glassell called hurriedly for reverse, the engineer dashed up to report that the explosion had nearly swamped the boat, extinguished the fires and jammed the machinery.

At this moment the Federals opened a heavy fire in which the boat was struck 13 times. Glassell seeing his ship helpless under a severe fire ordered his crew to take to their life-belts and sink the boat.

Meanwhile aboard the ironsides and monitors confusion reigned. The heavy fire directed at the *David* caused them to believe her sunk when she drifted off in the darkness and was lost to view. But boats were lowered and the sea combed for possible survivors. In this way Glassell and Sullivan, the fireman, were picked up as prisoners. But the engineer after swimming for nearly an hour saw the *David* drifting along apparently unharmed and made his way back to the ship where he found the pilot still aboard. Together they raised steam, repaired the engines, and brought the little craft safely back to Charleston.

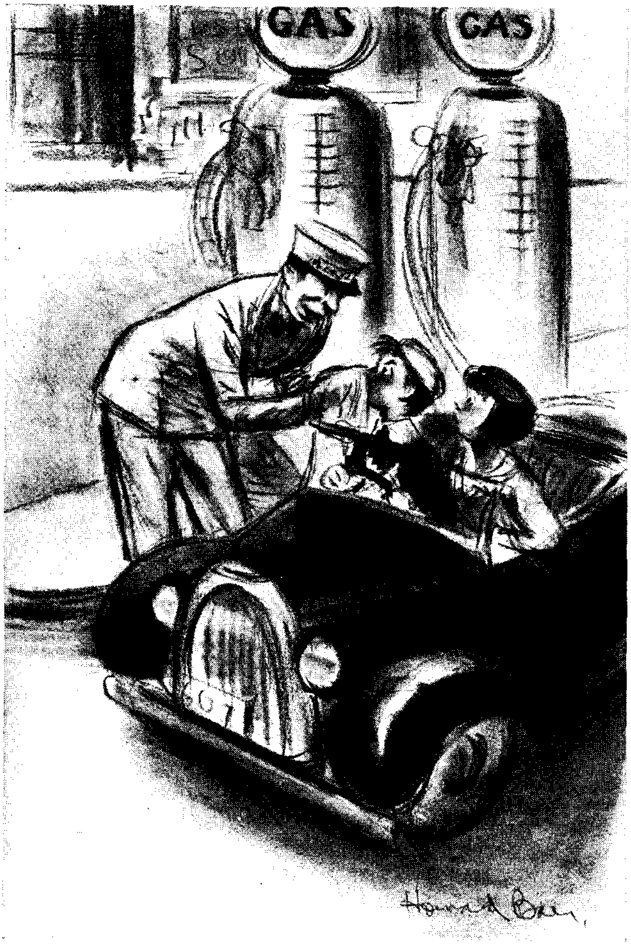
The damage done to the *Ironsides* was considerable. The failure to sink the great vessel meant nothing. In the minds of each officer and sailor one thought predominated—the torpedo had become an offensive weapon. The attack had demonstrated that a fleet could no longer lie at anchor with impunity. No ship would be safe from this attack below the water-line. In the words of Admiral Dahlgren the torpedo had taken its place among "certain offensive weapons."

Elaborate precautions were inaugurated to safeguard the fleet from further attacks. Each ship was to keep a full head of steam at all times to enable it to move at a moment's notice. Rope booms, precursors of our modern torpedo nets, were erected around each ship at night. Watches and picket boats increased in numbers and vigilance. Tugs encircled the ironsides all night. Truly a great respect was shown the copper cans of the Southerners.

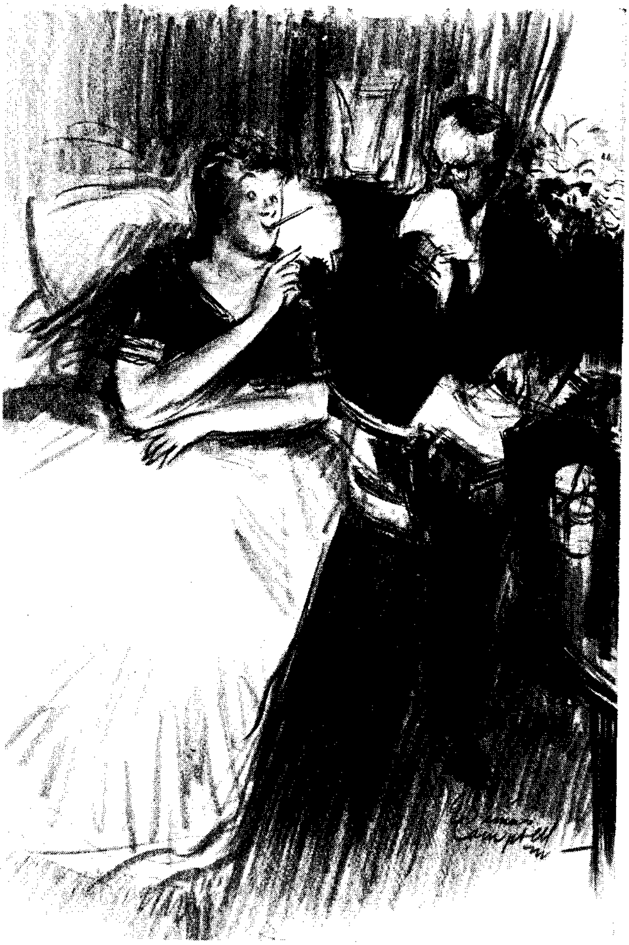
But this was not all. The Southerners had been at work on a more deadly weapon. It was a weapon the use of which would entail the greatest hardships upon the users. It was a weapon to be used only after and including the greatest exhibition of sheer courage ever recorded in marine warfare. In perfecting its battle technique five volunteer crews gave their lives; in carrying out its predestined purpose the sixth perished as they had known they would.

The story of the first successful submarine is an account made up of failures, failures which would mean long drawn out agonizing deaths beneath the waves of the harbor they defended so well. But it is the story of a sublime and selfless courage which has never been surpassed.

Shrouded in secrecy that gave it no name and practically excluded its record from the pages of history, the story of the *Hunley* has been painstakingly compiled from a number of


GAS
GAS
Howard Baer

"*Will that be all, sir?*"



"I'll tell you just what to take for that cold, doctor."

sources, many obscure. The details of the boat and its torpedo were related to the author by Mr. William G. Mazyck of Charleston, a well known local historian. Mr. Mazyck is the only man now living who actually saw the *Hunley* and its interior. He has seen it dive beneath a ship and has seen it drive its spear-headed torpedo into a heavy wooden target. His sketch of the *Hunley* enabled the author to recognize the boat in a pen and ink sketch on the wall of a home in Charleston. This, a contemporaneous drawing, is the only known picture of its kind. It is practically identical in details with Mr. Mazyck's account and emphasizes the narrowness of the hull until the picture becomes out of proportion with the two figures drawn in with it.

This third submarine was being tried secretly while the *David* was making her partly successful attack on the *Ironsides*.

At Mobile, Captain Horace I. Hunley constructed an original vessel for use at Charleston. It was small, less than fifty feet in length, and of a somewhat cigar-like shape. It was made of quarter-inch boiler plate. It had two small conning towers located on its deck and these were fitted with glass windows to serve as lookout stations. On the sides, a little forward of center, were two oblong horizontal fins connected by a rod running through the ship. At the stern a two bladed propeller operated in a cylindrical anti-splash guard with an ordinary rudder behind. At the bow a ten foot rod projected like a lance and was sturdily guyed in place.

Inside, the most prominent feature was the iron crankshaft which extended almost the entire length of the boat. Levers operating the horizontal diving fins could be seen near the steering wheel. Tanks and pumps so arranged as not to interfere with the action of the shaft were notable. Their purpose was to change bouyancy, exactly as is done in the modern pigboat of today.

Simply made, simple in construction, the little craft was designed simply to dive beneath the water, ram an enemy, and make its escape submerged. But six times some trifling unforeseen happening occurred and six crews of courageous men died. If the wheels of time had revolved to the point where science had achieved the invention of tanks for compressed air or possibly electric motors and batteries, the entire history of the *Hunley* might have had a different aspect but there was for those men only the normal supply of air in the hull, only a few minutes when they could be submerged with safety, after which in moments of lung racking torture, the oblivion of slow death. Six crews. Here is their record.

The first crew made a short trial trip at Mobile. The fish boat proceeded nicely until the first dive was made. Tanks were flooded, diving fins depressed and down she went. Down she stayed. Rescuers managed somehow to raise the boat but not until long after the skipper and crew were suffocated.

Two flat cars carried the boat to Charleston where she was launched at the Chapel street dock of the Atlantic and Northwestern Railway. Behind a huge board fence built to keep out prying eyes a crew of volunteers under a Lieut. Payne boarded the ship and took their stations. The fish boat was tied up to the dock with hatches open. Payne from his station at the forward hatchway where the wheel was located, was checking over the duties of each man before casting off. A steamer came down the river at a fast rate. Her side swells swamped the boat through the open hatches, drowning the entire crew with the exception of Payne.

She was immediately raised and Lieutenant Payne led a new volunteer crew over the blanketed forms of the former crew, still lying on the dock, and took the little torpedo boat to Fort Johnson at James Island, the site of the present Quarantine Station. There the Hunley boat, as lacking another name she was beginning to be designated, was moored to another boat already at the dock. Some reports say that this was the same boat which caused the previous sinking, the Confederate steamer *Etiwan.*

Somehow, through misunderstanding or neglect, the *Etiwan* steamed off without warning and the unfortunate iron submersible once more became a coffin, this time for six men, as Payne and two other men escaped from it.

One story related by an eye witness tells of the sinking at Fort Johnson and the raising of the little craft in a small gulley alongside the wharf. The fourth crew of volunteers was already waiting to go aboard. When the boat was pumped out it was found that the bodies, terribly distorted and stiff in rigor mortis, could not be passed through the small hatchway. A carpenter with a saw and knife dismembered them so that they could be removed to make room for the waiting crew.

This time Captain Hunley himself, having faith in his craft and undismayed by the unusual bad luck which seemed to pursue it, took command and carried it to the quiet waters of the Stono river to train the fourth crew. They learned easily and soon the fish boat was skimming the surface, diving and emerging at will.

Then one day at a point thought to be near the present bridge at John's Island, the dive was too sharply executed and the submarine stuck in the mud on the bottom. All efforts by the trapped crew to dislodge her failed. Today this crew, eight in number, lie together in a lot at Hunley Circle in Magnolia Cemetery. Their headstones bear the simple statement that they lost their lives in the defense of Charleston Harbor. The date was October 15, 1863, just nine days after Glassell's venture with the *Little David.*

The boat was returned to the Chapel street dock and there the fifth crew of volunteers took charge. Misfortune might dog the boat. Unforseen catastrophes might sink her. The Charleston men believed in the ultimate destiny of their dangerous weapon. The men never failed.

The fifth crew became proficient in the management of the Hunley boat and practiced attacks against ironclads and wooden ships. In order to prevent the explosion of the torpedo from sinking the submarine as well as the enemy, two distinct weapons and methods of attack were used.

Against an ironclad the fish boat was to dive beneath the enemy hull and allow a torpedo towed astern to explode when the diving boat had reached a safe distance, interposing the enemy hull so the explosion would not affect it. This was done only in practice.

The attack on a wooden hulled adversary was a ramming attack similar to that employed by the *David* but a different type of torpedo was used.

The *David* nearly sank as a result of the explosion of her own torpedo. The Hunley boat could never hope to survive under the same conditions. So a torpedo was constructed which would enable the attacker to gain a safe distance before it exploded. The ten foot spar projecting from the bow of the fish boat was fitted with a sleeve which slipped on from the front end and to this the torpedo was attached. The head of the sleeve was a sharp spear fitted with saw teeth raking back along its edges. In an attack, the fish boat would ram the intended victim below the waterline and the spear head would be driven deeply into the wooden hull. There it would be retained by the saw-toothed edges while the driving boat backed away. The torpedo was left hanging from the imbedded spear and was exploded by a cord attached to the trigger, when the fish boat had backed off some hundred yards or so.

In practice the fifth crew became skilled in both methods of attack. The spear-headed torpedo was launched against a wooden target suspended from the side of the Chapel street dock and so deeply did the little boat drive the spear that it took a workman considerable time to chisel it out.

Everything at last seemed ready for an attack on the blockading fleet. And then one afternoon when practicing with a towed torpedo a hawser from the Confederate ship *Indian Chief* entangled the Hunley propeller and another crew made the fatal sacrifice.

On the banks of the Ashley river at Charleston there is a stadium, dedicated to a Confederate general, a native of Charleston. At one side of the stands is a small, white fenced lot in which some fifty small stones may be seen. One row of these stones tells a story with very few words. Seven stones, two of which bear names. The others are marked merely, "No. 1. From Torpedo Boat; No. 2. From Torpedo Boat," etc. On the two stones which bore names and which stood between the five numbered stones was the too significant date January 18, 1863. (The 1863 is clearly an error on the part of those who marked the stones in later years.) The last resting place of the fifth crew of the Hunley!

The casualty record of the submarine was, so far, at Mobile, 8 men, at Charleston, 8; 6; 8; 7. A total of 37 men lost to the Confederacy and not a blow struck at the enemy to compensate for their loss! But what a flame the death of these men had lighted in the hearts of the men who were to follow! Average men, brave men, might well have cried quits and scuttled the ill-fated iron coffin. The defenders of Charleston were made of different stuff.

Hunley's close friend, Lieutenant George E. Dixon, now sought and received permission to raise a sixth crew and attack the wooden hulled U. S. S. *Housatonic*, a sloop of 16 guns, riding serenely at ease among the blockading fleet. Once more there was no dearth of volunteers and on the evening of February 17, 1864, Dixon embarked on the trip that was to justify his friends sacrifice.

Seven men in a cold dark hull which had been the death-trap for two score others, equally earnest, equally brave. Six were busy driving themselves and their ship to destruction. The seventh, Dixon, stood at the wheel. He must have thought of his friend who so shortly before had given his life at that very wheel. He must have known that the wheel his hand turned was guiding him to death. No man had survived when the boat was at play. There was no basis for hope of survival with the knowledge of two score deaths to predict the outcome.

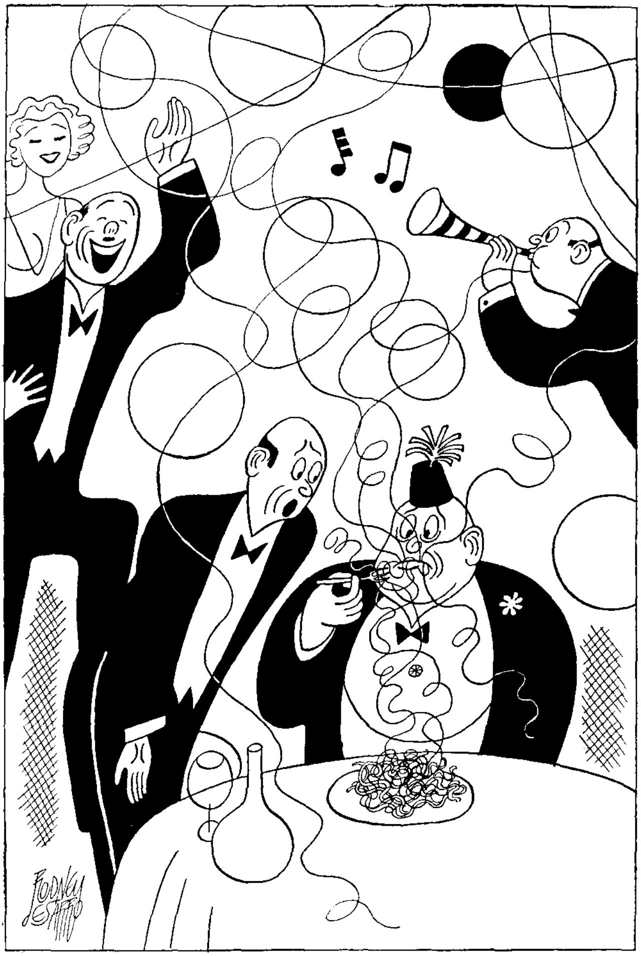
Straight at the enemy it drove, rammed its spearhead deep into the *Housatonic's* hull, backed away. For one full minute there was silence. Then Dixon's steady hand must have tripped the trigger cord. The night was ripped with flame and thunder, shouting and tumult, and down through the icy blackness of a winter ocean sank the broken fragments of a stricken ship.

Beneath her, first to reach the final resting place, plunged the *Hunley* with her gallant crew—a weapon that in destroying the enemy had destroyed itself.

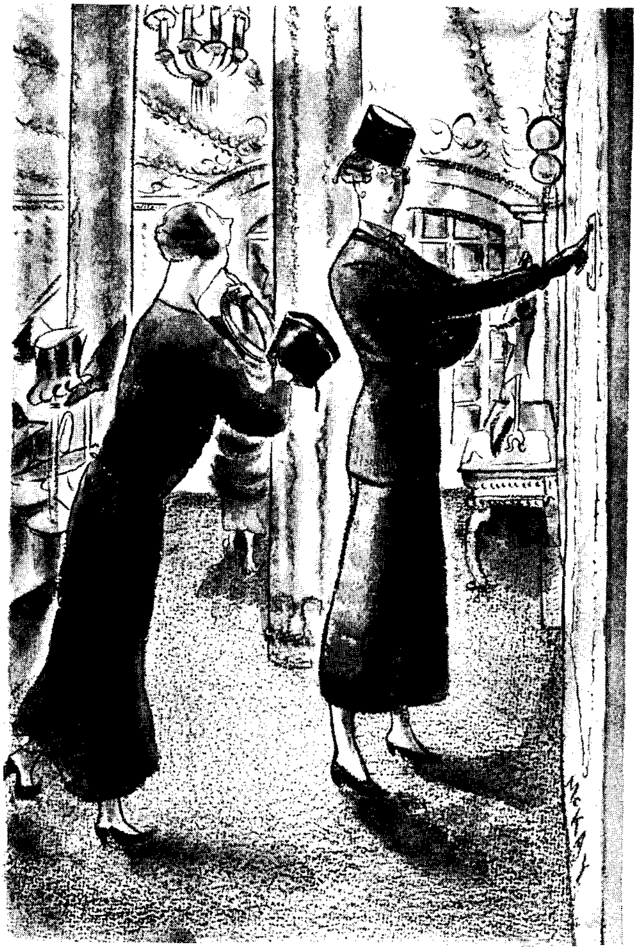
After the war the wrecks were surveyed by a Frenchman who described himself as a "Pyrotechnist" and who claimed to have set off the mine at Petersburg. This M. Maillefert told Mr. Mazyck that he had salvaged the metal from the *Housatonic* for scrap iron and that the ship had broken into three parts, the largest of which was resting upon the Hunley boat. As the latter was constructed of only quarter-inch iron and was small in size, it was deemed not worth the trouble of raising.

Beneath Sumter's waters the sixth crew lies in peace.

—Harry von Kolnitz



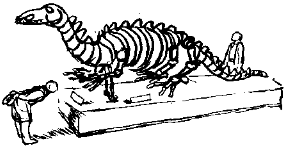
"I'm sorry, sir, but I warned you against ordering spaghetti on New Year's Eve."



"*Er—Madame—this is the hat—that's the box you're wearing.*"

THE STRANGEST ANIMALS

SEEKING TO DISPEL THE SAVAGE MYTHS, SCIENTISTS PROVED THEM



If I should start with the blunt statement that there is a saurian alive older than all those giants the bones of which fill our museums, it would sound very unlikely. And if I should declare that in addition to this high age this animal is equipped with three eyes, all this might be taken for fiction, and not for good fiction at that, because good fiction has to be convincing. But convincing or not, the thing is true.

When Captain Cook's men landed on the Australian shore that represented to them somewhat disappointingly the fabulous paradisic *Terra Australis Incognita* sought for centuries by sailors and adventurers of all nations, literally the first animal they saw was a kangaroo. It must have looked to them like an animal from Mars, a feeling that was expressed repeatedly later by learned visitors. While the later scientists sometimes did not know whether they were awake and investigating the animals of a new and hitherto unknown continent (that proved to be the oldest continent on earth) or whether they were asleep and dreaming impossible zoölogy, Cook's men did not have their heads reeling with scientific amazement. They just looked, wondered and asked questions of the natives, difficult as that was. They did not learn very much about the new country, but they were informed that "somewhere" there lived a giant black lizard which developed a strong and undesirable appetite for human flesh.

The Australian dragon was classified as a myth, it was believed that the natives had either exaggerated or that possibly somebody had misunderstood somebody. Eventually scientists discovered in Queensland bones of a gigantic monitor lizard, thirty feet long. Extinct nowadays, but probably still alive—very much alive—a few hundred years ago. The stories told by the natives found a surprising vindication.

Looking for the reported dragon, Cook's men finally found on a few rocky cliffs near New Zealand a lizard that was neither long nor especially dangerous looking. But it proved to be a much greater discovery than they could imagine. This little animal, about two feet long, dirty olive green in color and by no means a great sight proved to be a "dragon" of primeval days. Older and more important than the gigantic *Megalania* of Queensland. Equipped with three eyes, too, though the third is not very apparent and was not discovered until much later. The natives called the lizard the Tuatara, the scientists invented the names *Hatteria* and *Sphenodon* for it. Which name has to be regarded as official and as valid has not been settled yet.

When paleontology was new, scientists, scraping sandstone from fossil bones, had often wondered why the skulls of certain saurians always showed a peculiar hole on top. There was no zoölogical rhyme and no anatomical reason for it. One thought of a third eye, staring vertically upwards, but he did not dare to advance the idea. Others, having wondered long enough about these holes, eventually dared. There was a momentary confusion of thought and a lively though surprisingly short controversy. Then science had grown accustomed to the "third eye" of certain animals. Later a gland (called "epiphysis") was found inside the skull of almost all higher animals —you and I included—which could be satisfactorily explained as being the remains of the original third eye. It is known nowadays that this gland has to do with the control of growth, at least to a certain extent. The occultists believe that there was a time when the predecessors of men—whatever they may have been—looked into the fourth dimension by means of this eye.

Every event, a German philosopher taught, has the tendency to become a series of like events. It did in the case of the third eye.

Soon the "third eye" was discovered, almost equally well developed, in the skulls of the large lizards of the Galapagos Islands. And while German anatomists in co-operation with the British colleagues studied the nonfunctioning third eye of *Hatteria*, a Russian zoölogist by the name of Novikoff discovered a functioning third eye in the skull of a small lizard that lives in Germany.

While all these discoveries were the result of the narrative about an Australian animal that did not even exist alive considerable further excitement was caused by the discoveries of Australian animals that did exist. Australian fauna became, to put it mildly, a nuisance to European zoölogists. There was a whole menagerie of animals, jumping, running, swimming, climbing trees and even flying, that carried their young ones around in pouches while practising all these exercises. There was a bird that loudly shouted "cuckoo"; it was an owl. There were fasans (or what looked like fasans) running around on the ground; they were actually cuckoos. There was a parrot on New Zealand, which had become a bird of prey. There was a lizard that ran on its hind legs if excited (*Chlamydosaurus*) and a bird—*Chlamydodera*—that built only a small and primitive nest to hatch its eggs, but a large, artistic and beautiful nest of a far different type just for making love.

There was another small bird that did not look extravagant at all. Then it was discovered that its young have two little luminescent organs in the corners of the mouth so that the mother knows where to deposit her worms and caterpillars when crawling into the dark nest.

All this, however, seemed insignificant in comparison to the riddles offered by a little four-legged animal. It displayed a bill like a duck, otherwise it looked quite "normal" and somewhat beaver-like on first glance. It was the "water mole" or platypus or *Ornithorhynchus* if you want to hear the scientific name which means the "bird billed one." Platypus proved to be extremely difficult to scientists; though it is hard to displease a real scientist. They are always expecting the unexpected. Only very occasionally their patience is exhausted. Platypus was such an occasion. Scientists looked at it and then they looked away . . . a mammal with a bird's beak could not be true. It was not a specimen, it was a Jenny Haniver, an Eastern Mermaid, a fake, an imposition!

It might as well be said at once that platypus was neither a Jenny Haniver nor an Eastern Mermaid, but an animal surviving from primeval epochs. In short it was a representative of the first mammals on Earth. And it did not fit into the "system" created by the Swedish scientist Karl von Linné. His system distinguished Fishes, Amphibians, Reptiles, Birds and Mammals in the "phylum" of vertebrate animals. The system was based on the dogma that animals do not change. They do not evolve, but they were created. They may become extinct, if the Lord permits it, but if they keep on living they do not change.

So far, so good. But where on earth and in heaven was the right place for platypus? Decades after the discovery of platypus the German scientist Tiedeman still placed it in an appendix. It was an ingenious method to evade all possible difficulties, controversies and reproaches. But this method could not be used indefinitely.

Darwin alone could at last (1856) explain the astonishing facts; thus it was only necessary to verify the doubtful parts and to formally agree upon a place for platypus in the system. Linné's system was (and is) still in use, but with a better understanding of the true relationships and without the dogma of the immutability of species. Thus platypus was classified as lowest mammal. The question of the eggs was finally settled in 1884 by Dr. W. H. Caldwell of Australia and by Professor Dr. Wilhelm Haacke of Germany. Both found unhatched eggs in the pouches of females. Both reported their respective discoveries to the scientific world. The curious fact is that both reported on the same day, that both had made the discovery during the same week and that they did not know of each other!

The whole matter was just settled when Australia furnished the next zoölogical nuisance, the lungfish. Its story begins like a novel by Jules Verne.

In 1869 an Australian squatter by the name of William Forster, who had lived for a number of years on a farm near the Burnett river in Queensland, moved to Sydney. Visiting the museum of his new home town he became engaged in a conversation with the curator, Gerard Krefft, and asked him why the museum did not exhibit a certain large fish living in the Burnett river. The curator had to admit his ignorance and Mr. Forster, determined to render a service to science, wrote to his cousin, who still lived on the farm, for a few specimens of the fish. Thus Krefft was given an opportunity to make the greatest discovery of his career.

The new fish was about five feet long, it looked like a large fat eel of greenish color. But it had four strong and powerful paddle-like fins and a tail that was unlike any other fish tail ever seen. The thing was new in actual practice, but not in theory. Anatomists who had busied themselves with the theory of evolution had conceived fins and fish tails of this type and had taught that they must have existed some time during the course of evolution.

But the real surprise was the teeth. Mr. Forster's "Burnett salmon" had big teeth, looking like the comb of a cock—Krefft had to sit down for a while when he made this discovery. Teeth of this type were known, there was also a scientific name for them, given by no less an authority than the great Agassiz. The name was *Ceratodus*, the "horn-toothed one." But there was no fish for these teeth, because the teeth were fossil, a hundred million of years old.

It is perfectly understandable that the fish from the Burnett river caused a severe disturbance—fortunately only temporarily—of Krefft's mental equilibrium. A fish that possessed fossil teeth, that moved with theoretical fins and steered with a theoretical tail, in short a theoretical animal actually spread on the dissection table. *Ceratodus* had a lung too, not only gills like true fish. This was not as strikingly new as the discovery of the teeth. (Two lungfish were already known, one from the White Nile, the other from the Amazon river. Both had lungs with which they breathed air if the water became foul. Both survived the dry seasons in a state of suspended animation in the ground.)

Herr Geheimrat Professor Dr. Ernst von Haeckel in Jena, Germany, fiercest warrior of Darwinism and particularly devoted to the rule that the individual development re-enacts in shortened form the evolution of the species was most eager to have a special investigation made. And since the Australian biologists failed to furnish the material quickly enough he sent his pupil, Professor Richard Semon, on a special expedition to Australia.

Professor Semon thus achieved fame, Professor Haeckel was satisfied and science in general knew now the facts concerning the development of *Ceratodus*, the fish that was like *Hatteria* and platypus a mysterious survivor from forgotten ages.

All these stories are stories of Australian animals. And all are strange because these animals are survivors that were not only forgotten by time but by evolution too. Therefore they caused so much excitement in scientific circles.

However it must not be left entirely to Australia to create a strange animal. And the animal must not necessarily be a living fossil, to stir up discussion. There is the amusing story of the "bird that is not waterproof."

The hero of this story is a large bird, the so-called touraco of the family *Musophagidae*. The bird is about the size of a rather large parrot and is somewhat similar in appearance. Coloration: bright red with some green spots. Habitat: Africa.

About fifty years ago the French scientist Jules Verreaux returned from South Africa and lectured about his adventures during the rainy season. One of these adventures concerned touracos. Verreaux saw a number of them in a nearby bush. They were dripping wet, in fact they were so wet that they could not fly anymore. Verreaux tried successfully to catch one of them and discovered immediately afterwards that his hand dripped with blood. He looked for the wound, somewhat surprised that he had not felt the attack. There was no wound on his hand and there was no wound on the body of the bird either. Close examination showed that the red liquid was not blood. It must have been the red of the feathers, dissolved by the eternal rain.

Verreaux's listeners doubted the story. They smiled with perfect English courtesy when he told about his adventure in London. This was going too far. Man produces dyes and nature produces dyes. Those that are man-made are sometimes waterproof, those that are nature-made always. Of course, Monsieur Verreaux was a naturalist with some merits, his statement could not simply be doubted. In order to repeal his obviously erroneous report it was necessary to do some experimentation. A hunt for stuffed touracos began in collections and museums if the next zoo could not furnish a live specimen.

The experiments were simple, but their results were amazing.

Professor A's dead touraco was waterproof. Dr. B's live touraco was not. The zoo reported that their birds stood distilled water as well as salt water. Meanwhile Mr. C complained loudly that he had ruined his new and expensive white summer suit with red dye of feathers at least a hundred years old. His really shocking discovery was that the "red ink" he had so easily extracted from the feathers was excessively durable in the fabric of his suit.

However, it took forty years until a bright chemist found the answer to this problem. He asked himself what impurities water had to contain to dissolve "Turacin" as the red dye had been termed. Two hours of experimentation answered the question. As soon as there was the slightest amount of ammonia in the water Turacin dissolved readily. Rain water does not contain ammonia. Water that drips from leaves and twigs usually does. Thus the touracos in the bush were affected, Monsieur le docteur Jules Verreaux was vindicated.

Since then they try to keep a little supply of red touraco feathers in chemical laboratories. It is a very easy and convenient way to detect whether water is actually free of ammonia.

And since then the ordinary touraco ranges among the strange animals on earth. Those that do not look very conspicuous but that have a story which makes them ten times more interesting than the largest elephant and the oldest alligator or whatever other visible feature may catch the fancy of a casual visitor to a zoo or a museum. —WILLY LEY

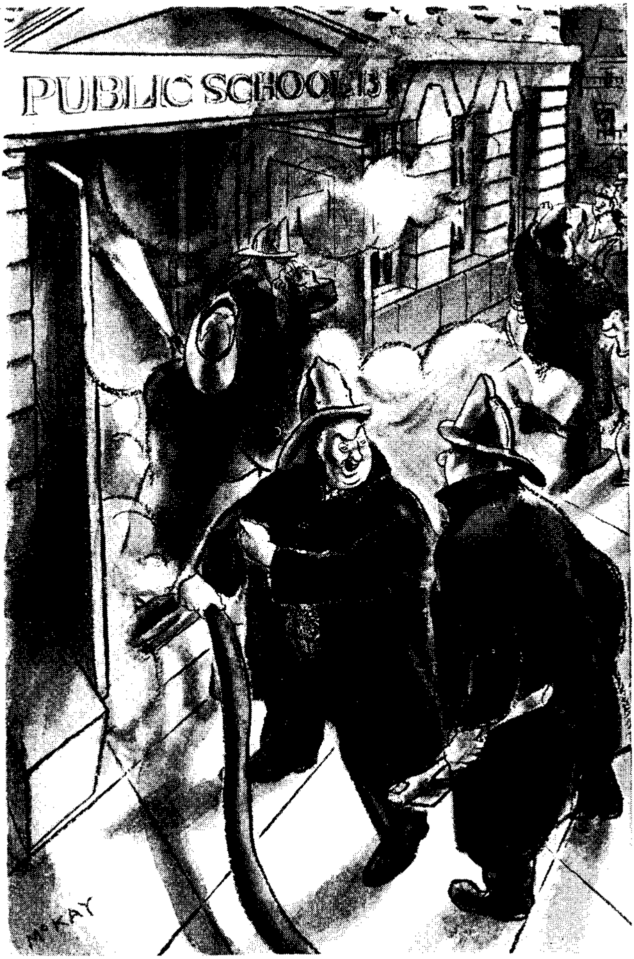
AUTOMOBILES

THE modern car is greatly aided by the modern road which is a thing of beauty and smoothness and is under repair two miles ahead. To avoid repair stretches, the driver takes curious routes known as detours. A great many people who have taken these have never been heard of since, but I have not as yet obtained statistics to prove whether this is definitely or definitely not a good thing.

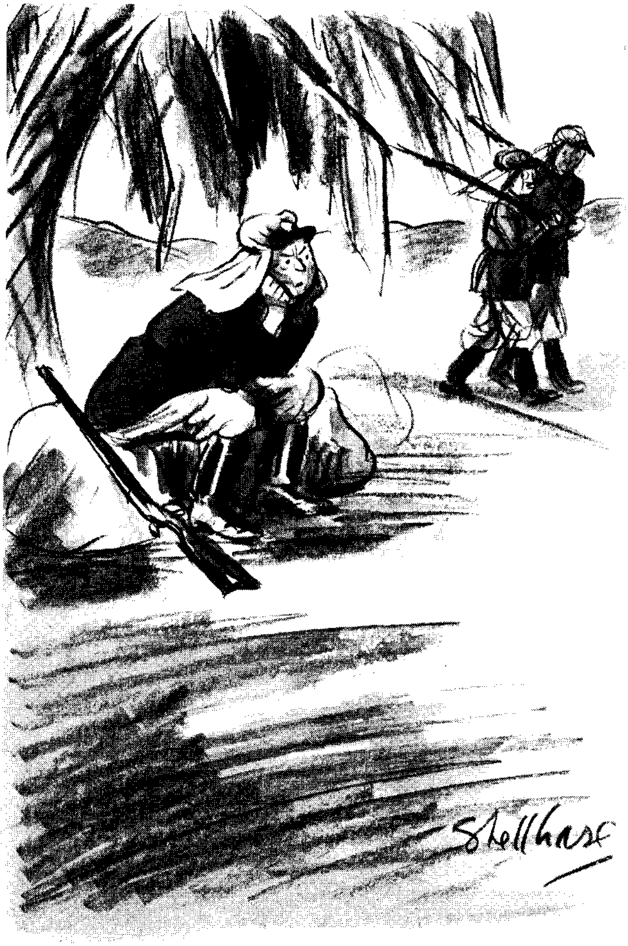
Automobiles nowadays have many fine accessories which make them a big improvement over the old ones. There is, for instance, a mirror on the windshield which enables women sitting next to the driver to see whether they have put on too much powder and lipstick. Sometimes men drivers fiddle with these mirrors, and turn them so they can see the road in back of them, but inventors are working on a fiddle-proof mirror which will only reflect the visage of the fair occupant in the right-hand front seat.

Another good accessory is the ashtray which is made very small so that it will soon be full and people can then go tossing cigarette butts into passing cars or dry grass on the roadside as usual. Radios are also in many up-to-date cars and enable one to learn in almost no time at all that there is an awful traffic jam up ahead.

Without the present-day service station you would get practically nowhere. There you can get water, air for your tires, candy, chewing gum, have your windshield polished, get a manicure, and even get gas if you insist on it. We would be absolutely nowhere without automobiles these days, and neither would the traffic cops. —PARKE CUMMINGS


PUBLIC SCHOOL 13
McKAY

"I'd have gotten a great kick out of this if it had happened twenty years ago."



"He can't remember what he came out here to forget."

FANTASIA IN F MINOR

SCIENCE IS THE ART OF KNOWING BUT SCIENTISTS DON'T KNOW THESE

In a day when Sir Arthur Eddington counts the number of elementary particles making up the universe, it may seem that at last we are approaching the secret of reality and may soon be able to explain the behavior of the various sub-groupings of these particles—such simpler clusterings, for example, as a water drop, a crystal, a tree, or even a rat.

Newspaper headlines, however, are deceptive. If we read closer we find it is not the number of particles in the actual universe that Sir Arthur has tabbed with his ingenious adding machine, but the number in an ideal cosmos of his own concocting. Like Einstein's mythical world of space-time, filled with all the matter it can contain but devoid of motion, and de Sitter's world of opposite extremes, empty of matter but chock full of motion, Eddington's world of 3 times 10^{79} particles is a fiction, a dream of the human mind. Therefore it is amenable to the fiction makers. By assuming certain simplifications, by ignoring certain obviously existing complexities, by adding a stimulating dash of imagination, and by stirring the whole with a rationalizing pencil of mathematics, the Cambridge professor arrives at a recipe for an imaginary universe which acts as if it were the real thing. Is it a similitude of our world? We do not know, but we accept it as a working model, and note in our history books that a new victory has been won for Promethean man—this eager, prying, restless, curiosity-bitten, willing-to-be-convinced creature, in size half way between a star and an atom, homo *called* sapiens.

All science is like that. All scientists proceed by a technique of fictionalizing. If the fiction appears to correspond to the observed behavior of nature, and particularly if it can predict behavior which later is searched for and found, we call it a good theory. If it doesn't, we try some other fiction until we hit upon one that is good. But no matter how good, always there is something that the theory does not account for, a gap in our plot, a clue that does not fit into our simplification, a villain who is never unmasked.

What makes a drop of water hold

together? A physicist may talk technically about surface tension, phase boundaries, dipoles. A drop of ether is smaller than a drop of water, and a drop of liquid hydrogen is smaller than the ether drop. I doubt if any practicing man of science would risk his reputation with the claim to an *understanding of the reason for these* differences. For any bedrock definition involves the atomic structure of matter—and who can say precisely what an atom is? The atom is, after all, a hypothesis, and the interior subatomic particles, which we imagine to be the building-blocks of reality, are even more recondite fictions.

A drop of water contains about 2000 million million million molecules—so I am informed by a chemist in good standing. Each molecule contains two atoms of hydrogen and one of oxygen. Nothing is more common than water, nothing is nearer at hand, more abundant for our prying, more available for dissection and experiment. And yet—

Each of the hydrogen atoms in the water molecule consists of two particular units of electricity, a negatively-charged outer particle in rapid revolution round a postively-charged central particle. The revolving satellite of this system moves at velocities ranging up to 1500 miles a second—but how the energy necessary to maintain this motion is continuously replenished is a secret, and why the satellite of negative electricity does not leap into the arms of the central nucleus of positive electricity in a grand merger, is another inexplicable. In telephone circuits, dynamos, motors, and other harnessed systems, a positive charge always seems to cancel a negative charge—but here in the deep abyss of the atom the two whirl in quaint defiance of *our* laws.

The oxygen atom, that other component of water, presents other complications. Its central nucleus is a composite structure and contains at least eight positively-charged particles—protons. Lord Rutherford named them at their baptism shortly before the World War. According to our previous experience of electricity, a positive charge should repel each other positive charge, and the nearer the two are together the greater should be the repulsive force. The Nobel Prize chemist, Frederick Soddy, has computed that if a gram of protons could be gathered together at one point on the earth's surface, and another gram at the opposite place on the other side of our planet, the mutually repulsive force of the two would amount to twenty-six tons even at that distance. It seems strange, then, that in the nucleus of the oxygen atom protons dwell together in peace and tolerance in a space that must be measured in multillionths of an inch.

Modern physicists account for this peculiar intimacy by a new theory which says that in atomic dimensions our familiar electrical law of positive charge repelling positive charge is superceded, and within these small spaces the particles respond to a new law of attraction. Such an assumption may describe the behavior, but it seems to violate our fundamental idea of unity. It is as though an observer on Sirius, beholding afar certain contradictory antics of humans here on the earth, should generalize and conclude that in space outside prisons a police officer exercises a repulsive force upon a criminal, but within the narrow space inside the effect is just the opposite and criminals and officers dwell together in close juxtaposition by a process of mutual attraction.

Though protons, and even atoms, are invisible, vast hordes of them may cluster together to form quite ponderable crystals which are plainly visible. I remember seeing a beautiful crystal of blue vitriol removed from solution. A sharp-edged corner was chipped off its prism, and the multilated crystal was put back into the solution. Examined a few hours later, it was whole again. By some mysterious process of accretion, the crystal had repaired itself from the material in solution, or the solution had ministered to the broken form and built up a new corner as sharp-edged and as symmetrically whole as the original. By what mechanics of selection the copper sulphate had deposited at the fracture without equally depositing over the entire surface is one of nature's hidden heirlooms—though the chemists have an explanation in terms of laws of diffusion and surface action, laws which again are descriptions.

Several years ago Professor G. N. Lewis, at the University of California, wished to study the properties of crystallized glycerine. But he couldn't get the stuff to crystallize. He evaporated it, he subjected it to low temperature, he tried all the wiles of the chemist, but in vain. Finally he learned that some one in Canada had a supply of crystallized glycerine, and obtained a small sample. When this was placed in the formerly recalcitrant fluid it immediately seeded, and glycerine crystals multiplied with the rapidity of an epidemic. Indeed the California laboratory became "infected" from the importation, and thereafter there was never any difficulty in getting any new sample of glycerine to crystallize.

A curious adaptive behavior of crystals is exhibited in the performance of certain metals. If a rod of nickel steel is grasped at opposite ends by powerful clamps and subjected to a tremendous pull it may elongate and begin to narrow at a certain point of weakness, and if the tension is not relieved it may break at this place. However, if the force is relaxed and the rod given a few moments' rest, something happens internally which becomes manifest as soon as the tension is resumed. For now the rod resists distortion at the narrowed section, and when it begins to elongate under the renewed tension, it gives at some other point. A second rest results in a strengthening of the second narrowing. It is as though the molecules of the alloy rushed reinforcements to the threatened place, to fortify it. By this alternating procedure it is possible to invoke in the insensate metal a "heroic resistance to rupture" such that a bar which in its original state was capable of considerable elongation becomes throughout its entire length hard, fragile, and inextensible.

Aluminum has keen affinity for oxygen. The instant a piece of fresh aluminum is exposed to the air, oxygen molecules rush to its surface and coat it with a skin of aluminum oxide. Now the melting point of aluminum is about 659° Centigrade, that of aluminum oxide is over 2000°, and taking advantage of these differences Professor John Wulff at Massachusetts Institute of Technology performs a spectacular experiment. He takes a piece of aluminum wire and suspends it in a flame, at a temperature of 700°. That is not hot enough to melt the ensheathing skin of oxide, but it should be sufficient to fuse the pure aluminum within. Professor Wulff demonstrates that it does: he sticks a needle into the skin and the liquid metal spurts out as the skin collapses like a pricked balloon.

Analytical devices show that more of the radiant energy of sunlight is broadcast in the form of green rays than in any other. But the fact that practically all vegetation is green shows that most of this green light is rejected, *i.e.*, it is transmitted and not absorbed. Soy beans grown with red-yellow light matured into delicate twining vines, but similar beans with blue-violet to energize them grew into sturdy herbs.

A Texas friend who spends vacations in the Northwest has been fascinated by the Douglas fir, so erect, so pointed, so symmetrical. Cut off the tip of a tree, and very soon one of the side branches lifts up, straightens to a vertical angle, and assumes the apical position. But why? What determines which branch shall substitute for the missing apex? What prevents it from straightening its posture when the apex is there? And how does it know when the apex is gone?

Dr. E. J. Lund has found that the cells of the tree generate currents of electricity which travel up its limbs and branches, that the voltage is greater in certain regions, and that these areas of high electrical potential seem to exercise a control over those of lower. He has found that the apex of the tree is electro-positive with relation to the tip of each branch, and that the tip of each branch is electro-positive to the tip of any branch below it. This suggests that the apex is the region of highest potential, and that the branch which possesses the next highest is selected by its own electrical capacity to serve as the new apex.

If these ingenious experiments with trees suggest that electricity is the determinant of growth and differentiation, they only push our question farther back, to sift the watery salts held in cohesion by unresting cells.

At the meeting of the American Psychological Association in Dartmouth College last September, Dr. Stevenson Smith exhibited a machine on three wheels which bumped its way through a complicated maze, learned by trial and error all the false turns and blind alleys, and then made a second trip through without a wasted inch of motion. A "mechanical rat" they called this robot, a quicker maze-learner than any flesh-and-blood rat.

But for resourcefulness in an emergency, the rat that takes the prize of my esteem is one that Dr. W. R. Whitney chanced to pick for an experiment in his Schenectady laboratory. Whitney was interested in exploring the biological effects of radio waves. He chose two rats as the guinea-pigs of his study, and set them up in housekeeping in a spacious glass tube.

Around one end of the tube he coiled the antenna of a short-wave radio generator. In the other end he placed a chunk of ice in a receptacle, as a center of refrigeration. He also put in some cotton batting as nest-building material.

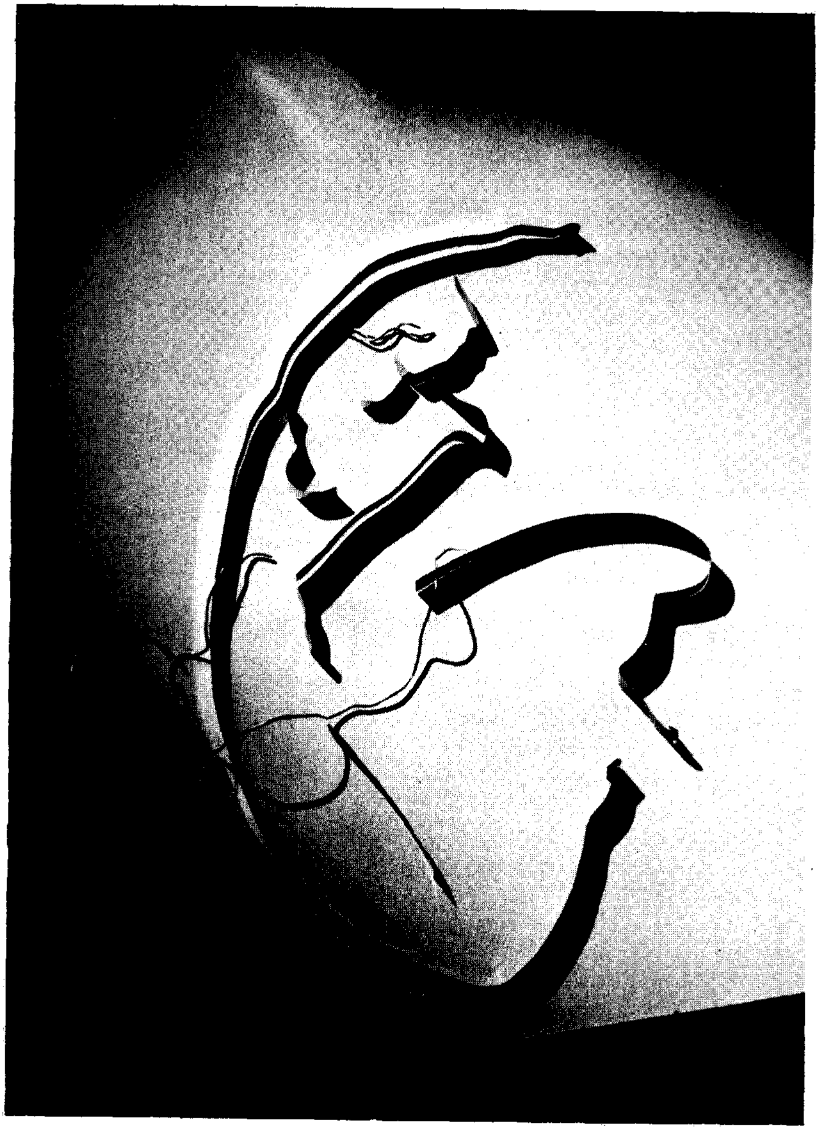
Soon the rats discovered the warm zone of the radio-heated end of the tube. They used to bask there for hours at a time. They dragged the cotton to that end and built a nest.

After the rats had become acclimated to this comfort, the experimenter gradually increased the intensity of the radio transmission. Presently life in that area was too hot. The rats moved their nest to the other end of the tube, regardless of the ice. Occasionally, though, they would venture into the radio zone, and Dr. Whitney made it a practice to feed them there.

One day, as they were eating some fresh celery, the raw stalks began to steam from the heating of the invisible radiation. The rats dropped the food and retreated to the far end of their dwelling. The vapor continued to jet out of the celery. A cloud was rapidly filling the glass house. Deliberately one of the rats picked up the cotton batting and pushed it toward the oncoming wave of steam. He wadded the material into a dam and shut off the invasion. In the cool of the iced end of the tube the vapor condensed and the air cleared.

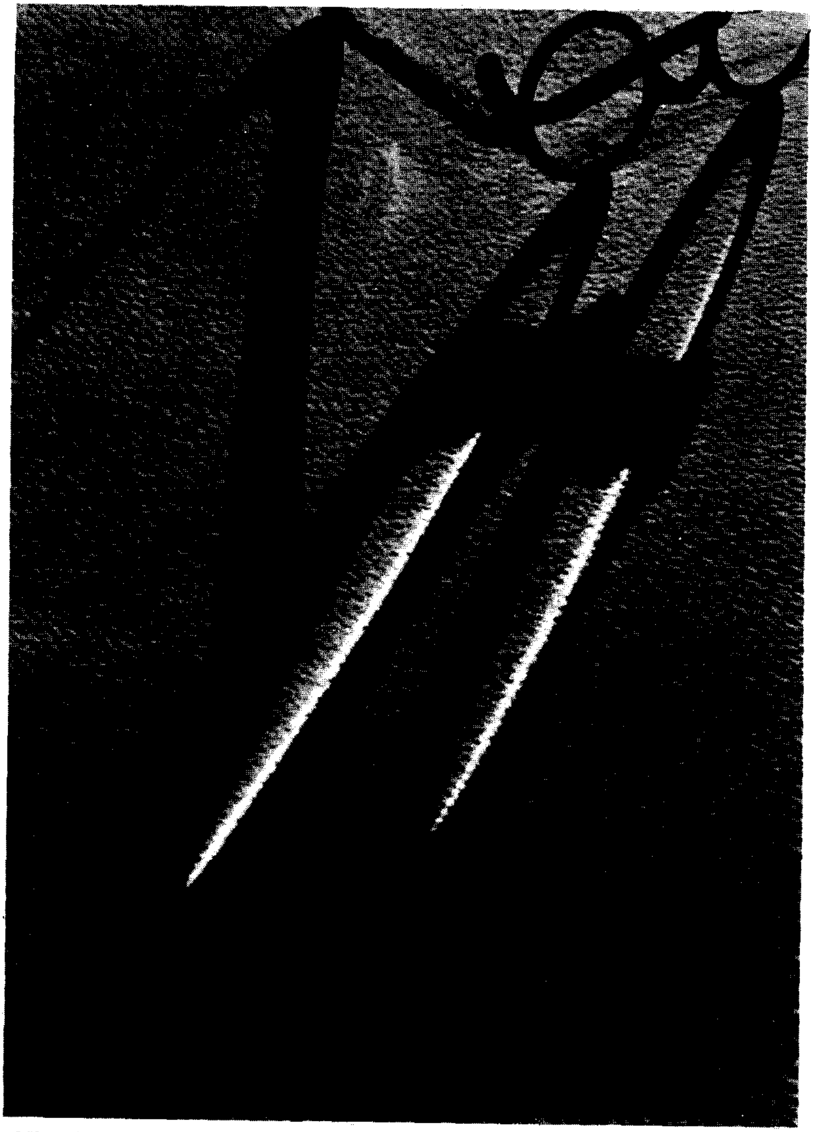
Mechanists say they can build a robot capable of reproducing *all* the forms of adaptive behavior of a living rat. But, they say, the mechanical rat would be at least as large as the capitol at Washington. It would require millions of times as many particles as go into the making of a living rat. Nature is more parsimonious in its use of Eddington's 3 times 10^{79} units.

—George W. Gray



WESTELIN CHICAGO

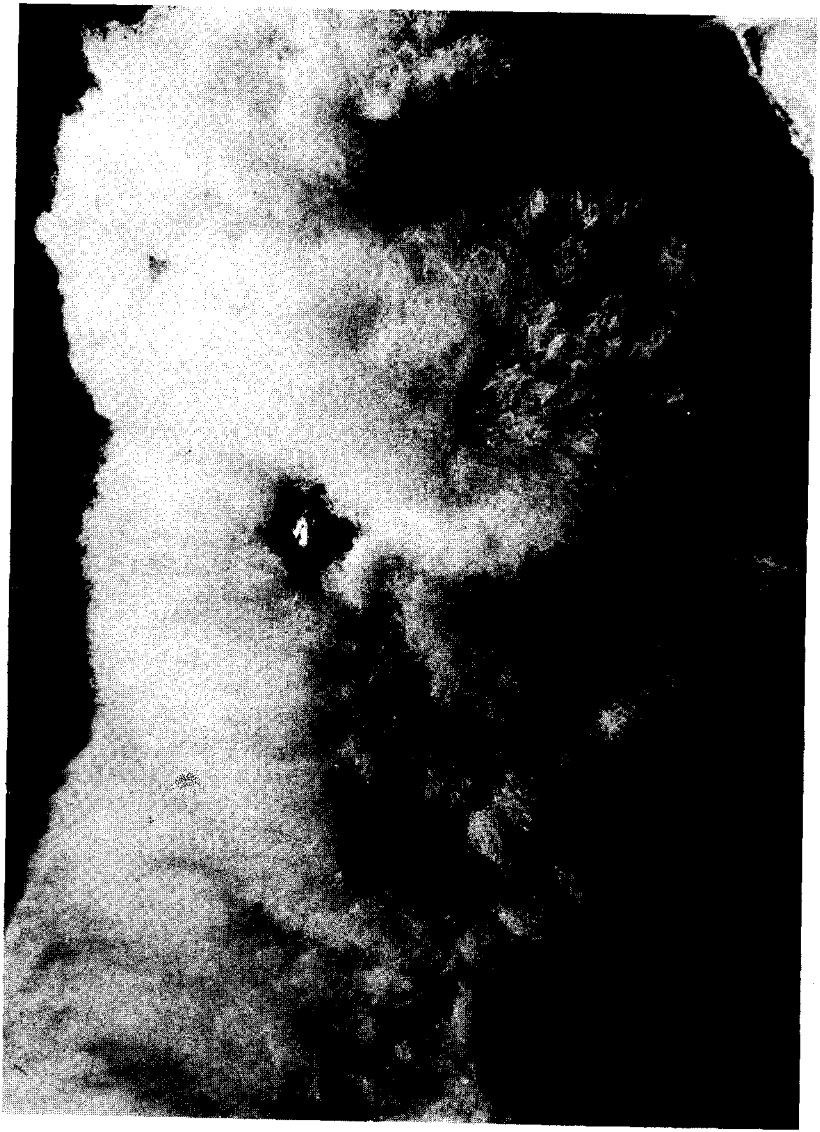
COPPER AND ALUMINUM



COUNTESS EVA MIHES BUDAPEST

SPECTACLES

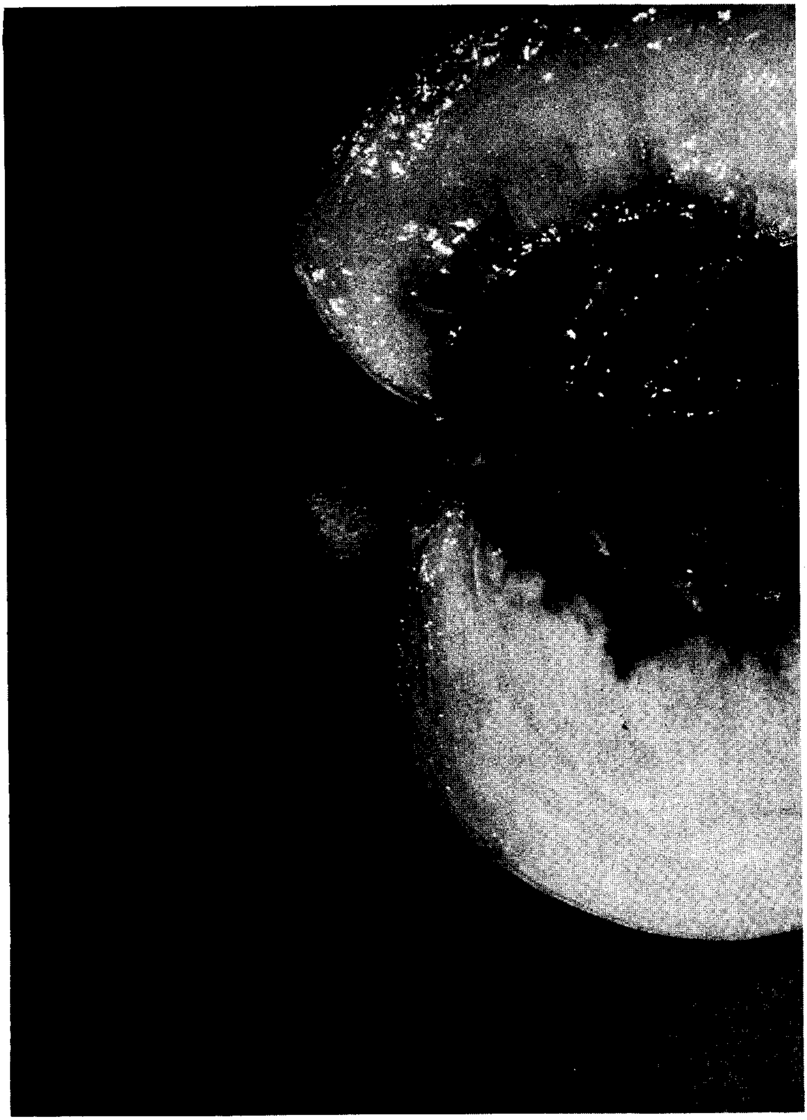
JANUARY, 1937



F. RAYMOND ARCHER

YONKERS, N. Y.

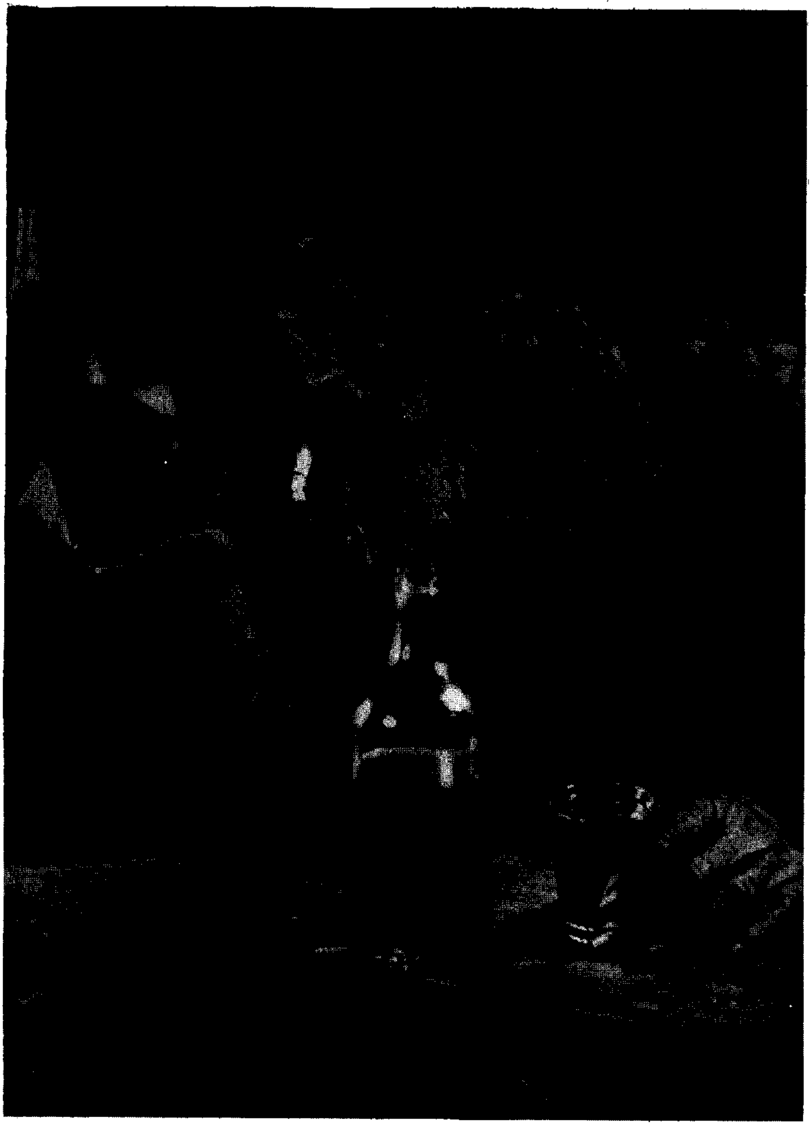
WOOL PUP



WESTELIN CHICAGO

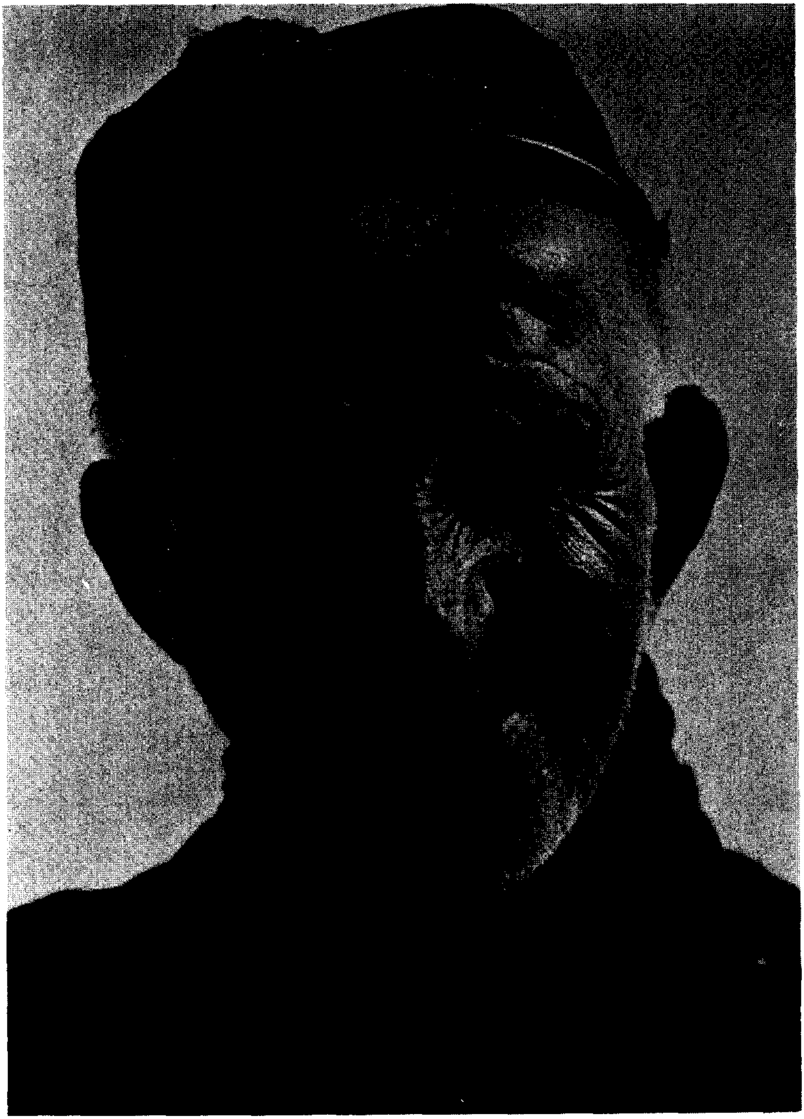
HALVED PEACH

JANUARY, 1937



DR. KAUFMANN BUDAPEST-EUROPEAN PHOTO

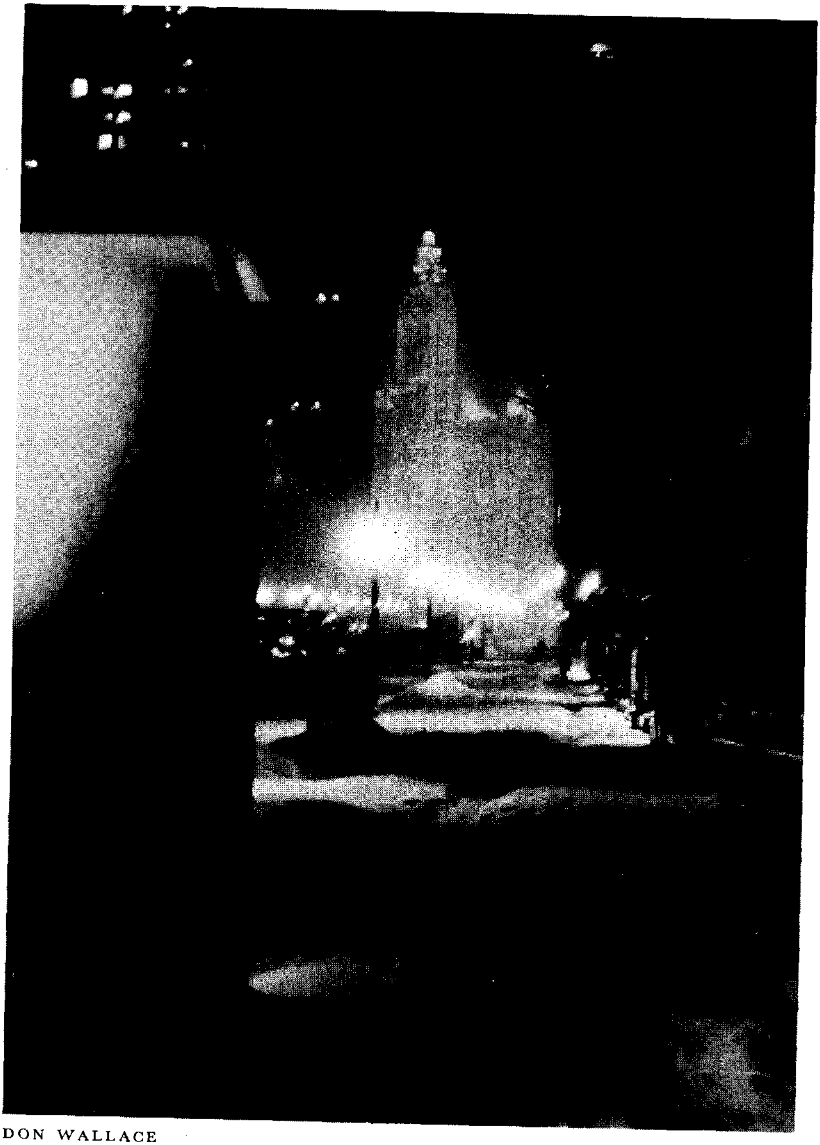
AGE DEFEATED



ALFRED BLOK AMSTERDAM

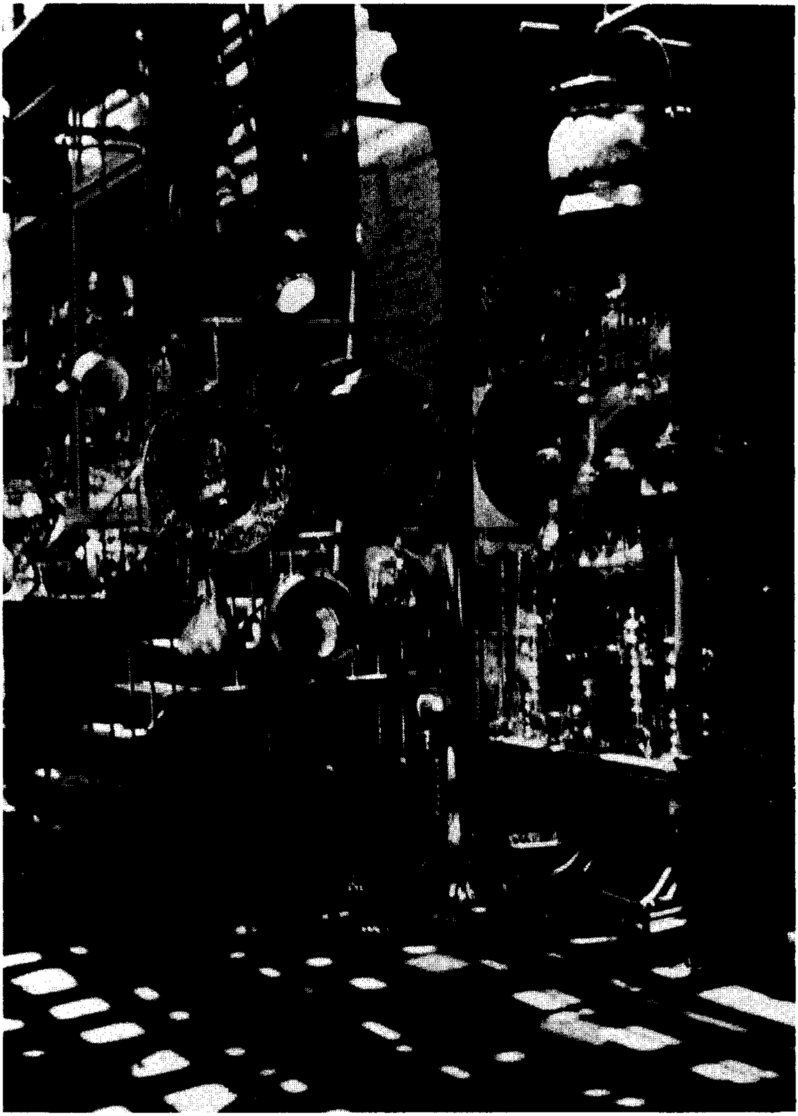
AGE UNDAUNTED

JANUARY, 1937



DON WALLACE CHICAGO

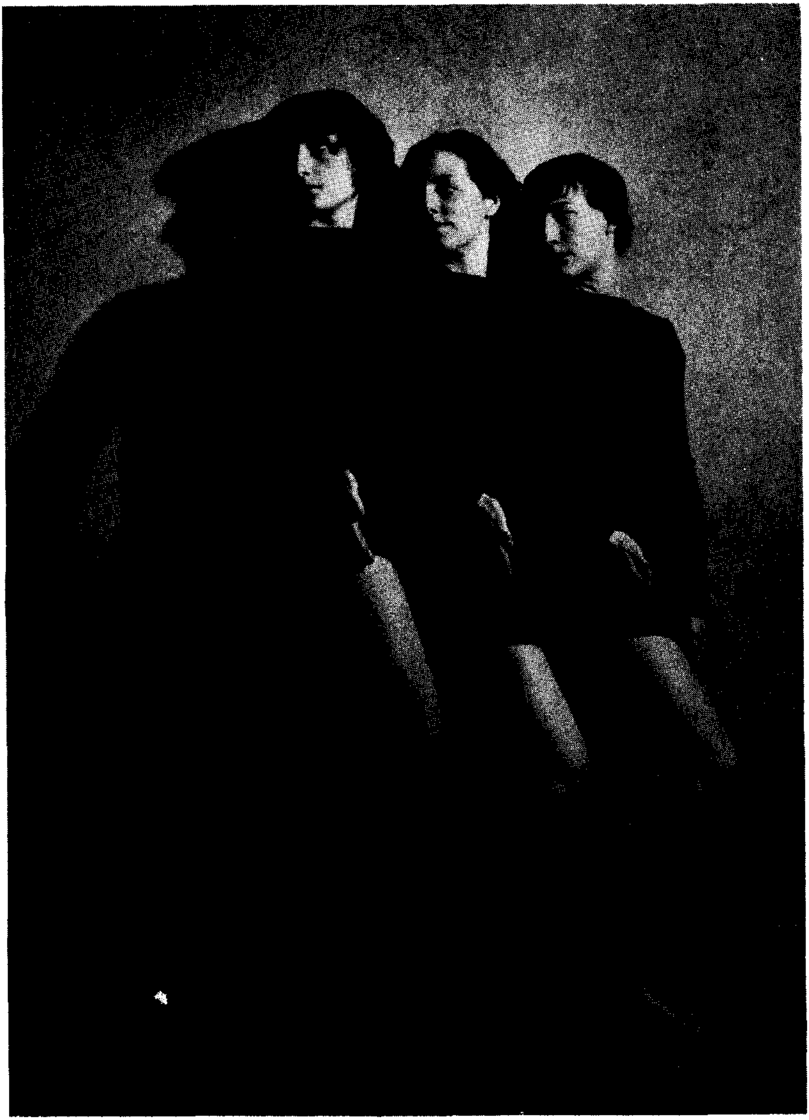
BOUL MICH



DR. MICHAEL WISHENGRAD NEW YORK

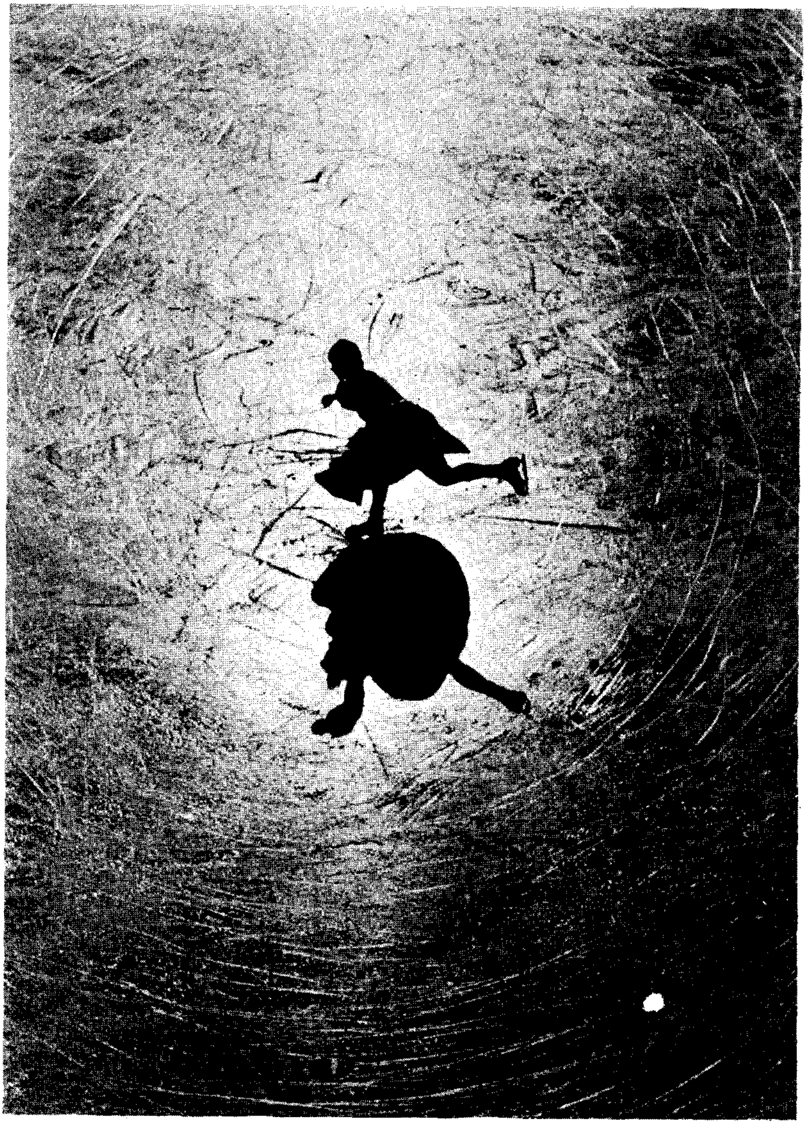
ALLEN STREET

JANUARY, 1937



WESTELIN CHICAGO

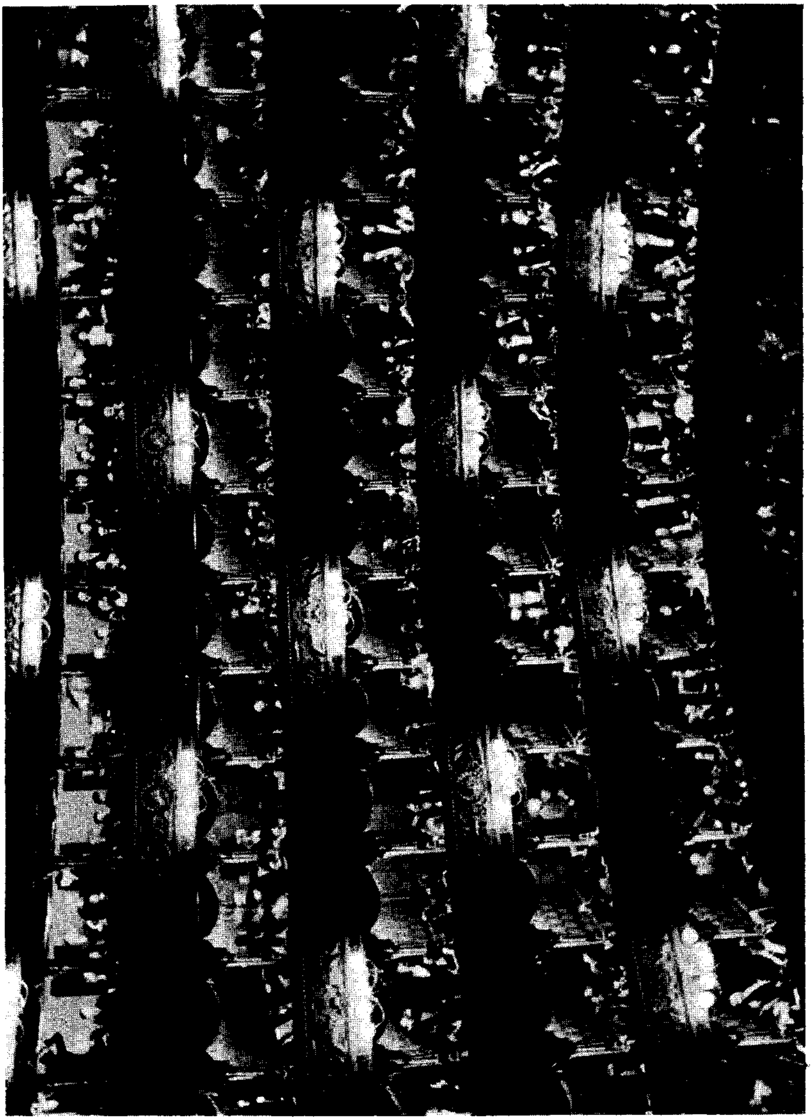
THREE GRACES



ALFRED EISENSTAEDT PIX PHOTO

SONJA HENIE

JANUARY, 1937



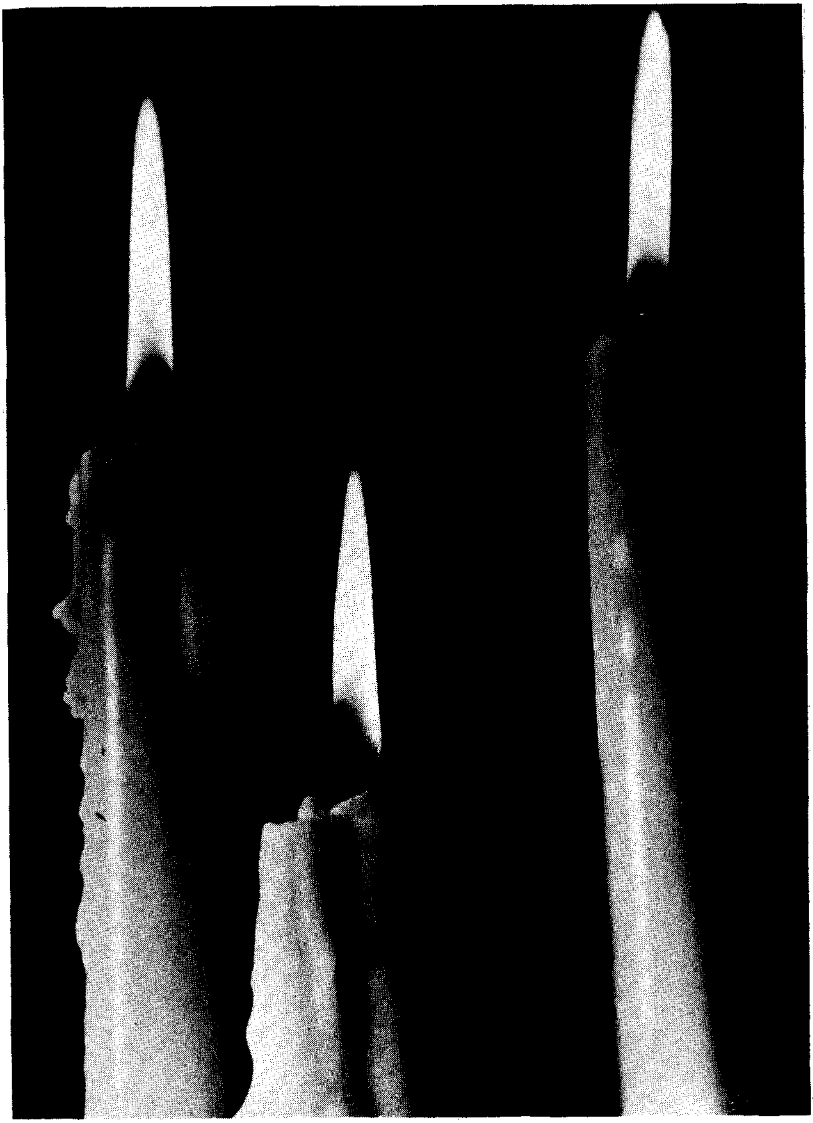
ALFRED EISENSTAEDT PIX PHOTO

BOXES AT LA SCALA

A. B. C.-I. RONA

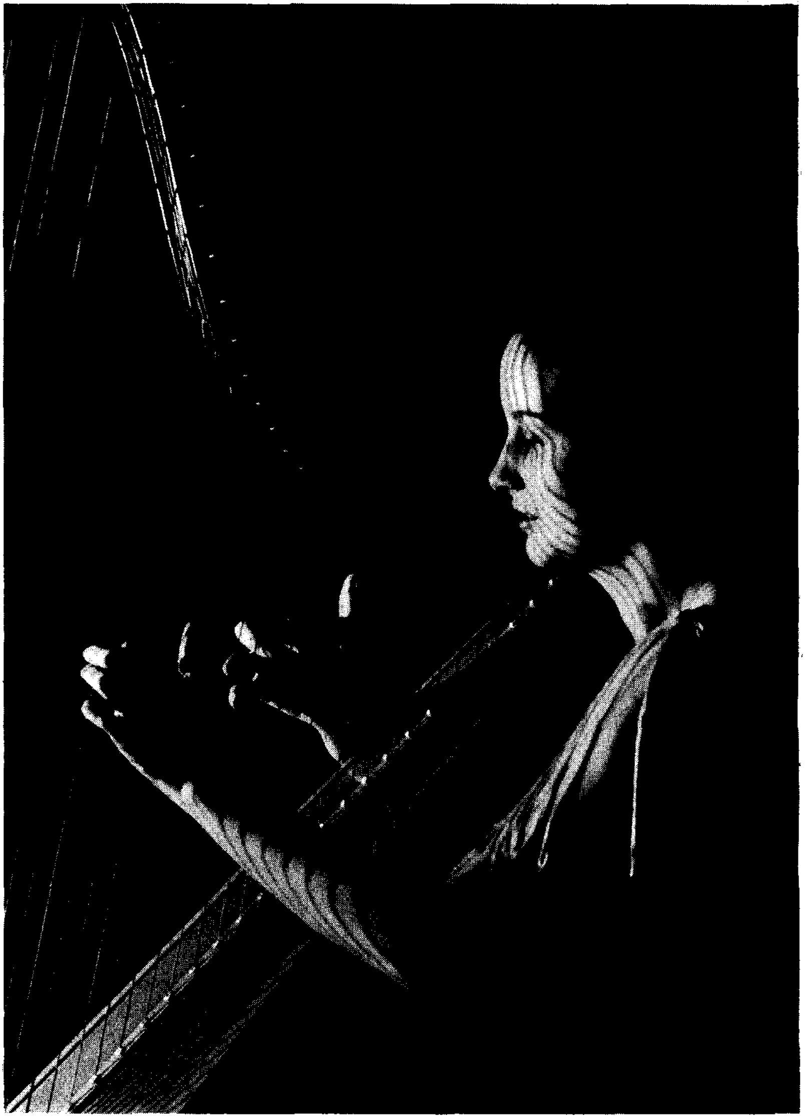
EUROPEAN PHOTO

PLATZ IN BUDAPEST



ROBERT L. MCFERRAN MINNEAPOLIS

"THESE BE THREE SILENT THINGS"



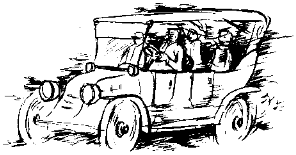
JOHN W. BARRY CEDAR RAPIDS, IA.

EVENSONG

JANUARY, 1937

OLD NUMBER FOUR

HER TONNEAU WAS TALL AND STATELY AND SHE WAS A LADY ALL BUT ONCE



The first light of dawn that paled the little windows in the old brownstone garage was reflected in the highly polished bodies of two automobiles that stood there, side by side, sound asleep. One of the cars was a Packard: a tall, broad-beamed veteran enjoying a nicely brushed old age. The other was a Chrysler: a young car, low, streamlined, impudently youthful in every curve of her seductive body.

Suddenly the quiet of the new-born day was broken by a sorry mechanical din which jolted the Chrysler (a newcomer to the garage) from her early-morning slumber. It came first on a low and distant note, far up the alley, and reached a crescendo as it passed the garage.

The little Chrysler, startled, glanced at the Packard and saw that he was awake but taking it calmly.

"What was that?" asked the Chrysler, sounding a note of alarm.

The Packard looked down his long hood and with fine dignity replied: "That was Number Four pulling out for the suburban market. You'll not mind it after the first week or two."

The Chrysler lifted her cowl in polite interrogation. "Number Four? What is Number Four?"

* * *

The car we all know as Number Four (began the Packard) started life as the pride and joy of her age. It is sufficient for me to say that she was a Scott-Hampden. Her body, every inch a custom job and tailored to fit the proudest purse on the Avenue, covered a chassis built like the framework of a skyscraper: a framework that was all for business, just as her upholstery—and I mean upholstery—was made with an eye to comfort.

Those of us who knew her will never forget the majesty of her movements. That high, sweeping curve of the tonneau, that magnificent curve that has now been replaced by the flat-chested styles so much in vogue, was a sight for sore headlights. Design such as that has gone from the streets. It is seen only in revivals of the elegant panorama of a past age.

She was big—I do not deny that. But she carried her tonneau with dignity, even with pride. It was the dignified carriage that comes only from breeding. I think you know what I mean—she was a lady. We all felt it. There was a certain something in those big brass headlights . . . Now I come to her engine. Of course none of us ever saw it but we knew it had double carburetors and twin ignition—this was long before these refinements were to be found on every lousy production job on the street—and the potential speed that lurked beneath that aristocratic hood was the speed of a thoroughbred.

As she barged up the Avenue not a sound came from her save that faint hissing which seems to mark the effort of fine motors to keep in leash. She moved, I think I can safely say, like a crawling lioness. She seemed ready to spring forward—swiftly, noiselessly, irresistibly—at the slightest movement of the throttle. There was a sense of power, even, in the slow turning of her great wheels. All beauty, you must know, is not that of line and contour. There is a beauty of motion, as well. She had it . . .

The Scott was owned by the Misses Hathaway, two maiden ladies of aristocratic ancestry and extreme elegance who lived in the old brownstone mansion that used to stand where our apartment building now rears its ugly head. This garage, in those days (it was originally a stable, you know) opened into a driveway that lead out to the Avenue. (This alley exit is, I may say, something new in my life. We've had it now for only eight years.) This old garage was the class of the Avenue. Quite the class. When the Scott was to be used, the doors were swung open with a special flourish, and the Scott, with one solemn toot of her horn, would ease out, swing gracefully down the driveway, while the Avenue held its breath . . . She reminded you of a great Spanish galleon, under full sail, standing out among the lowly ferryboats and tugs that lined the curbs . . .

The Misses Hathaway—after a suitable interval—would sweep down the front steps, holding their dresses in their thin hands and their noses at the correct elevation, and would step graciously into the magnificent tonneau. That tonneau—alas! we have lost sight of tonneaus . . . The horn would honk once more, with admirable restraint, and the great car would roll silently up the Avenue and away to church.

I have tried to point out (continued the Packard) that the Scott-Hampden was made not only for appearance and for comfort, but for speed. You will *not* appreciate the significance of what I am about to tell you unless you realize that the beauty of the Scott went all the way through. Cars that are made for speed and never attain it are—well, I think you get the point. Even you, young as you are, have had some magnificent rides. Last night, when you came in, I thought I detected a slight piston slap. But to return to the Scott—

She was doomed to a living death. This awful fact gradually dawned upon all of us on the Avenue. The Misses Hathaway, well meaning souls, had sentenced the mighty car to a life that was limited to fifteen miles an hour in the straight stretches, and half that around the corners. She had everything to make her happy. Everything but speed—even one little burst of speed, in a tentative way . . .

But nothing ever happened.

A hundred and fifty horsepower lay mouldering in the grave beneath her handsome hood!

On Tuesdays Miss Alice Hathaway went down to the Woman's Exchange with the famous Hathaway chocolate cake; on Wednesdays both attended the Ladies' Aid; once or twice a week one of the sisters took a ride over to one of the nicer shops. On Sunday the Scott had her big day. After church the Misses Hathaway brought the minister home, and following a refined dinner they took a one hour's ride on the better boulevards.

* * *

Again the Packard paused. It seemed to the Chrysler that he flecked a speck of dust (was it dust?) from one of his lamps.

* * *

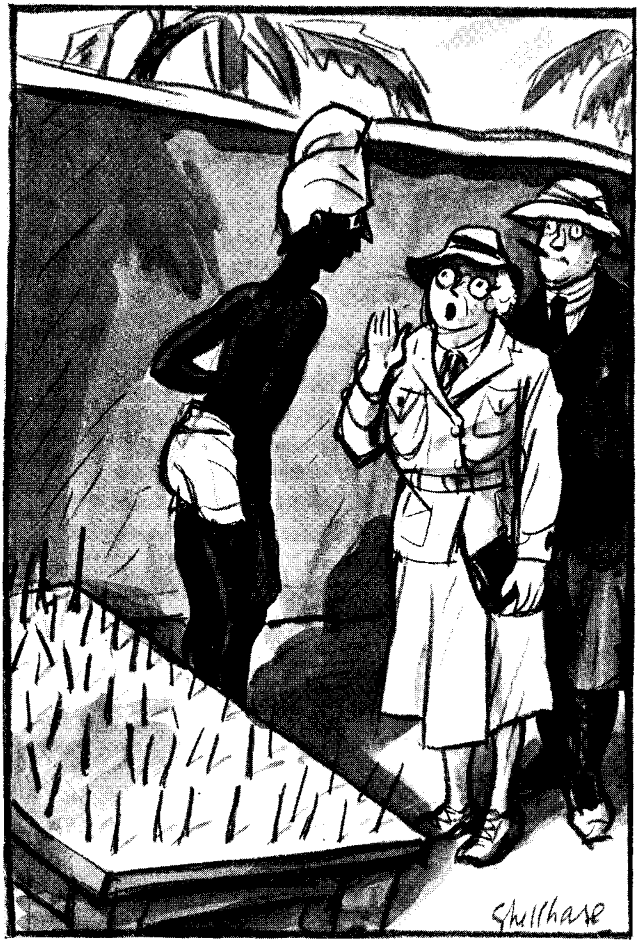
The Scott, said the Packard, began to grow old. As the quiet years passed in their quiet way they left the aging car with a permanently frustrated expression on her handsome face. As the style in bodies changed, she seemed to grow in stature. She towered above everything in the street. Her fashionable tonneau began to take on the general feeling of a poop deck; she sagged slightly in the waist; the spring of youth had begun to leave her cushions.

But her silent motor was as powerful as ever; her gears still were the epitome of hand-forged perfection. Outside, the splendid finish of the Scott had begun to crack. Inside, she was unworn.

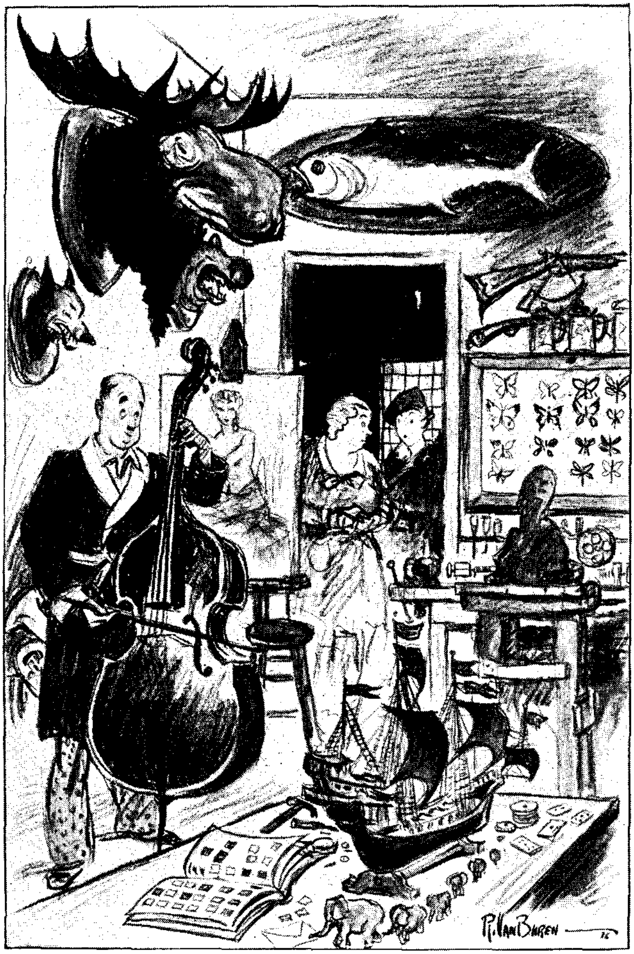
New, shiny, swift audacious little cars made their appearance on the Avenue in large numbers. Streamlined, glittering, they accurately reflected the age that had given them birth. They could stay out all night without showing it. They carried built-in radios. They secreted unlawful liquors in their side pockets. Their manners—perish the thought of their manners!

They dashed around the majestic Scott like swallows around a great hawk. They passed her on either side; they scooted across her bows. Some of them developed a certain rubber arrangement attached to the exhaust, and when passing the graceful Scott as she moved in well-bred restraint along the street they would make a peculiar noise, as in derision: a signal of disrespect which would have annoyed the Misses Hathaway, had they understood it.

But the Scott went her own way, and the tiny snickers of the upstart models meant nothing to those of us who knew her sterling qualities.



"*Don't get up on my account.*"



"He has so many hobbies he's had to give up his job at the office!"

Then came a certain night. Part of it I heard from the Scott herself; part of it came out in court; some of it I read in the papers.

On this night the Misses Hathaway, having returned from some trifling excursion, ordered the car left at the curb, since they expected to attend a church supper later in the evening.

This was the last time that any of us ever saw the Scott as we had known her.

The first intimation that there was anything wrong was when she went past us at a good forty miles an hour from a standing start. We all looked up.

It was as though the British ambassador, calling at the White House, had suddenly spit upon his hands, danced a clog, disappeared in a clap of thunder. Looking after her, we saw a strange man at the wheel, and another beside him.

Well, as it developed later, they staged a hold-up over on the East Side within half an hour. But imagine trying to stage a hold-up with a Scott-Hampden, and one no longer in her youth! You could spot her six blocks away. The sound of pursuing sirens came from the right, from the left, from the rear. The bandits realized their mistake. They saw that to attempt to lose themselves in the crowd was hopeless. Abandoning any attempt at anonymity and protective coloring, they adopted speed. They dashed up darkened streets and along glittering boulevards at a speed that set a new high mark for urban travel. They took the stretches at close to seventy and they made the corners on three wheels, two wheels, one wheel, and no wheels at all.

But nothing in the way of real speed happened until they got out into the wide open spaces where the Scott could really breathe and let herself go. The great motor roared a challenge to the night. The Scott's muscles were loosed at last, and she poured into her new freedom all of the pent-up energy of ten long years of repression and futility. Now that, at last, she had been called upon to give, she gave all. And more . . .

All pursuing cars soon were distanced, and the bandits drove her slowly up a side road and left her in a ditch. There they abandoned her: panting, devastated, deserted: left to the solace of her recent memories and the comfort of a new realization. Her finish was scratched, but her indomitable spirit was uninjured. The warm tears that spilled from her radiator were tears neither of humiliation nor of despair: they were tears of hysterical origin . . .

For hours she lay there—forgotten. Forgotten, did I say? That was what she thought, too. But imagine her joy when, out of the blackness of the night, came three men, and imagine the thrill that was hers when she saw that two of them were the bandits who had recently deserted her! She had done well! They were returning! The younger one slid into the driver's seat, and the Scott, although she was very tired, and still hot from her recent ordeal, responded to the touch of youth at her throttle. But this was a more dignified ride; she moved slowly, and made up in style and finesse what she was not called upon to deliver in outright speed.

They headed, not back to the wickedness of the city, but toward the freshness and innocence of the open pastures. They were coasting along, and the Scott was inhaling the cool roadside mists with complete abandon, when suddenly—

Suddenly three sharp internal explosions shattered her windows!

Instantly a warm fluid began to spread across her expensive velour!

She could scarcely wait for the pressure of the accelerator to send her leaping forward into the night! Stark terror swept her very soul! Although this was her first night out, she was no fool! She knew . . .!

After a brief burst of speed the driver stepped on the brake pedal. She slowed down, drew over to the side of the road. The door was opened. The Scott felt her load lighten, and heard a dull, roadside thud!

They hurried on, and had begun to circle back toward the city when another car, a phaeton with drawn side-curtains, pulled alongside.

Without warning a new terror ripped open the night. All hell was suddenly let loose. A terrific, staccato roar came in short bursts that were punctuated by the awful silence of expectancy. Hot needles pierced the body of the Scott.

She leaped forward in utter agony as she felt the jar of machine guns in her tonneau. The accelerator touched the floor-board, and she knew that she was being called upon to give every ounce of power in her system. The internal pain was terrific; her insides were an inferno. But she tried.

She groaned in agony and called upon her last reserves!

Every revolution was torture!

Her motor was becoming molten metal, and it screamed in its despair!

A connecting-rod was the first thing to go. Although the Scott realized that every cylinder was burned, and that she never again would be able to hold her compression, she had hoped to escape major injury. But she felt the heat of melting metal along her crankshaft, and the rod went out.

The radiator of the pursuing car passed hers, there was a final deafening roar, she felt the hand at her wheel relax, she saw a curve coming . . .

* * *

"Go on!" cried the Chrysler. "What happened?"

The Packard swallowed hard before continuing.

* * *

When she came to, it was daylight. She was leaning against the wall of a building, in a sort of courtyard that was formed by the backs of other buildings. She was guarded by a policeman of the third class.

Some men came out of a doorway and stood in a group near her. One of them laughed. Two of them took pictures of her. Another boldly lifted her hood and peeked into her.

The next day she was taken home. A muddy, disheveled, desolate wreck, she was towed by a red truck to the curb in front of the ivy-covered home of the Misses Hathaway, where she had known her innocence and her youth.

The Misses Hathaway came out and took one look at her!

Those of us who were on the Avenue will never forget the expression on the faces of the Misses Hathaway!

They agreed that she was ruined, and although their ignorance of motor cars was as abysmal as their ignorance of other matters affecting the general behavior of life, they understood, in a vague way, that she had brought disgrace on their house.

That afternoon the final blow fell, and the last hope of the Scott for clemency, and her old place in the Hathaway circle, faded.

Her picture was in all the papers!

The picture showed her as she had appeared in the courtyard of the police station: leaning against the wall, glassy-eyed from terror and exhaustion: muddy, discouraged, beaten in body and crushed in spirit.

She was called the Death Car.

The Death Car!

The Misses Hathaway looked at the papers, pulled down every shade in the house, retired to the seclusion of the third floor and the solace of smelling salts and cologne.

The Scott-Hampden was sold to a Greek who owns a vegetable market on the street in the rear of the Avenue. He took the car in, washed her, bathed her wounds.

Then—

Then he had her painted red. This was a blow. The Scott-Hampden a painted creature! If he had painted her in a subdued tone, it would not have been so bad, but he had selected vermilion—a color that screeched its message from as far as the eye could follow it. She served as a general omnibus for the Greek and his friends and relatives, and *their* friends and relatives. On occasion they lent her to others, outside the family circle, who, you may be sure, cared little what became of her. . . . She soon was being taken out by all comers, just so they had the price of a little gas. Think of it! The price of a little gas!

They drove her until she was steaming, and often, having ridden her all over the county, up one road and down the next, they would leave her standing outside in the rain.

Often they would race her engine in the presence of guests, just to hear the funny noises that came from her vitals.

This was, indeed, a terrible period of her life. But we all respected the Scott, because she faced her life bravely, with neither complaint, on the one hand, nor pretense, on the other. She did not tell anybody that she was putting a son through college. She never hid her head beneath the cloak of synthetic respectability; neither did she flaunt her red paint before the eyes of the neighbors. She simply went her way: a red car with a burned-out bearing.

Then one day Mr. Potopopolous, her owner, found a new employment for her. He needed a car to make the dawn run, out to the suburban markets. He gave the job to the Scott-Hampden. It was at this time that she lost her name, her last treasured possession (although she perhaps would have preferred it that way) and became known as Number Four. The coat of red paint had effectively obliterated her name plate. Nobody knew her make. The janitor of the building next door had once been a locomotive fireman. He had been one of the crew of train Number Four, which always started its run promptly at dawn. So this janitor jokingly named her Old Number Four. As such she is known today.

Her tonneau holds a lot of vegetables, and Mr. Potopopolous is satisfied with her.

As for her, she serves him steadily and well. She holds her head up in the alley, and has found a measure of happiness in groaning out of her meager shelter at dawn and beginning the long trek to the markets—at fifteen miles in the straight stretches and half that around the corners.

* * *

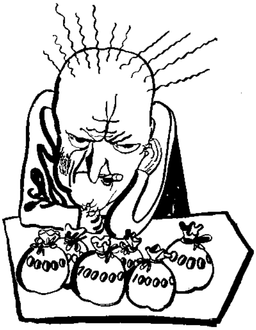
The Chrysler remained silent for several minutes. Then she said softly: "You loved her!"

"I have asked for the honor of her hand," said the Packard simply.

"But how—?"

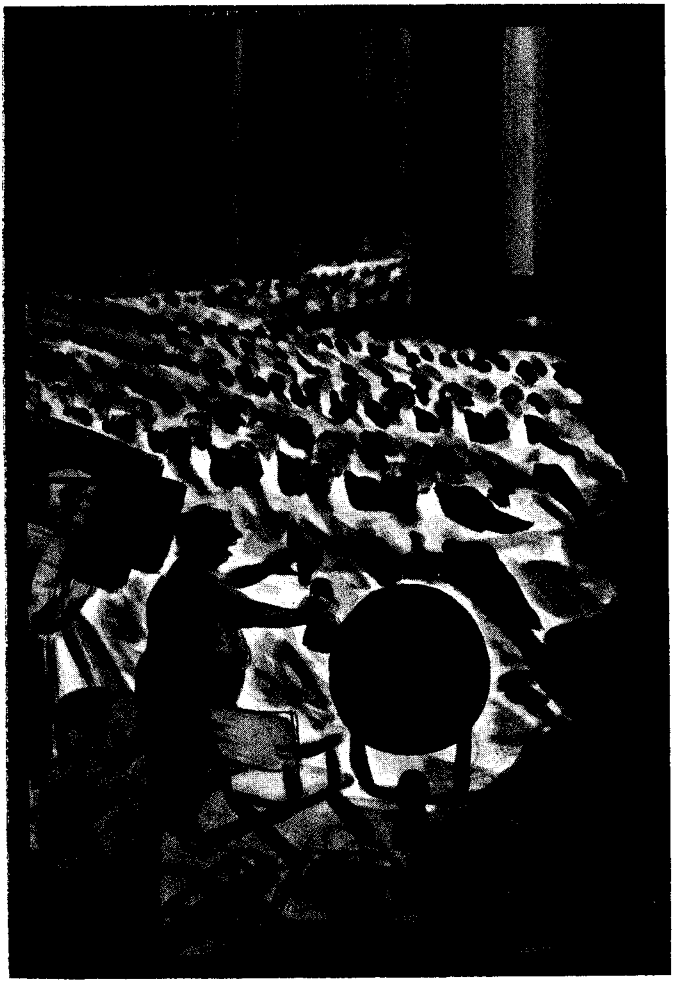
"Mr. Potopopolous," continued the older car, "was talking to our owner yesterday. He is thinking of expanding his business." —Donald Hough

MR. TUMBINE'S GUILTY FEELING

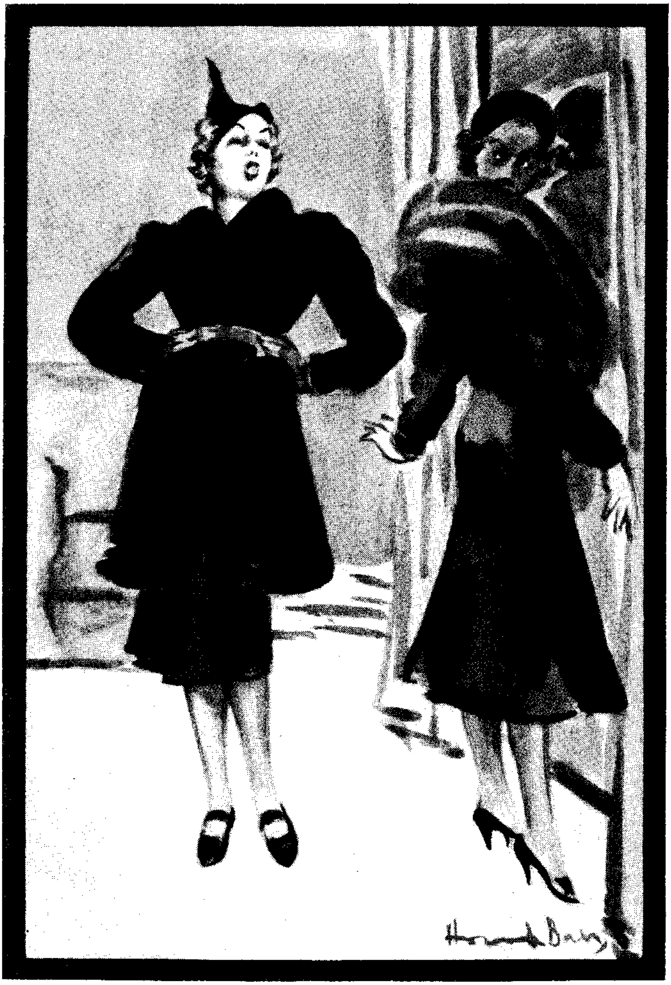


That shame-faced man is Mr.
Tumbine.
He has a sense of guilt about his
money.
All this poverty around makes him
feel culpable.
Most people would be willing to
take a chance on a sense of guilt.

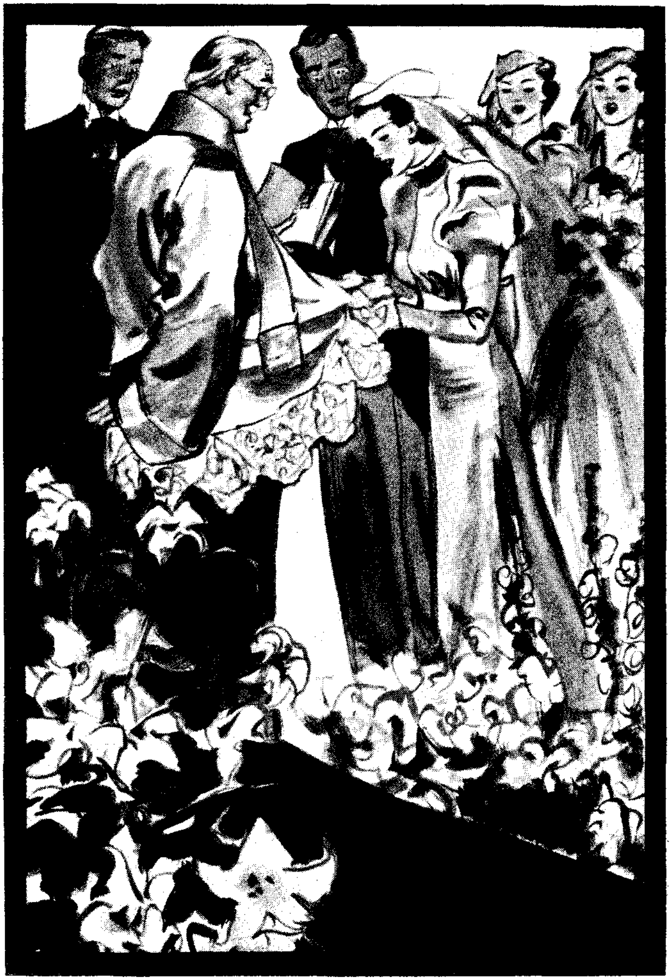
—O. S. M.



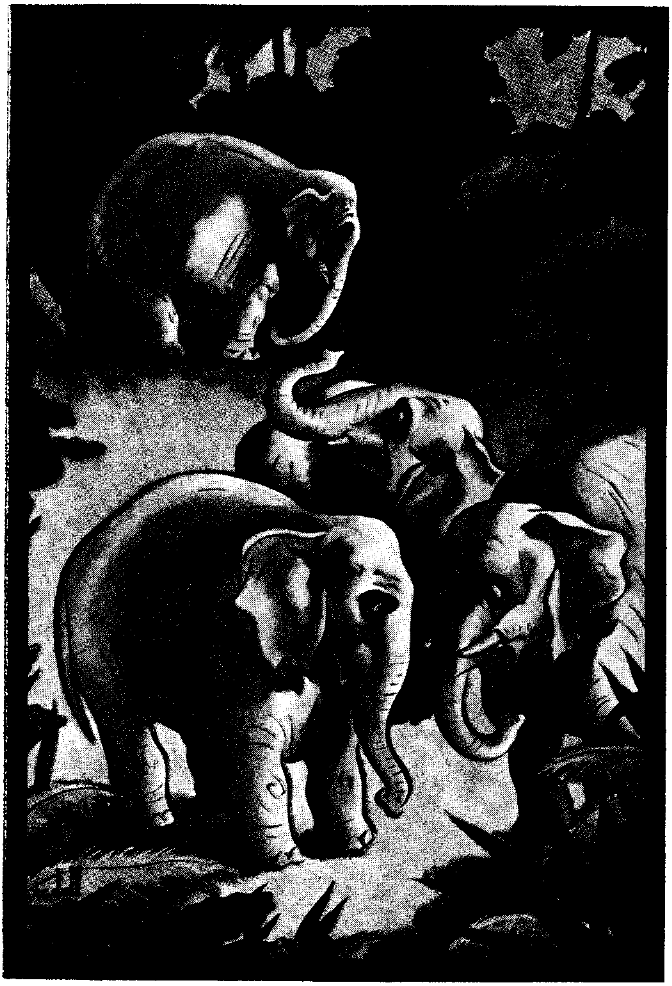
"It's perfect—one more would ruin it."



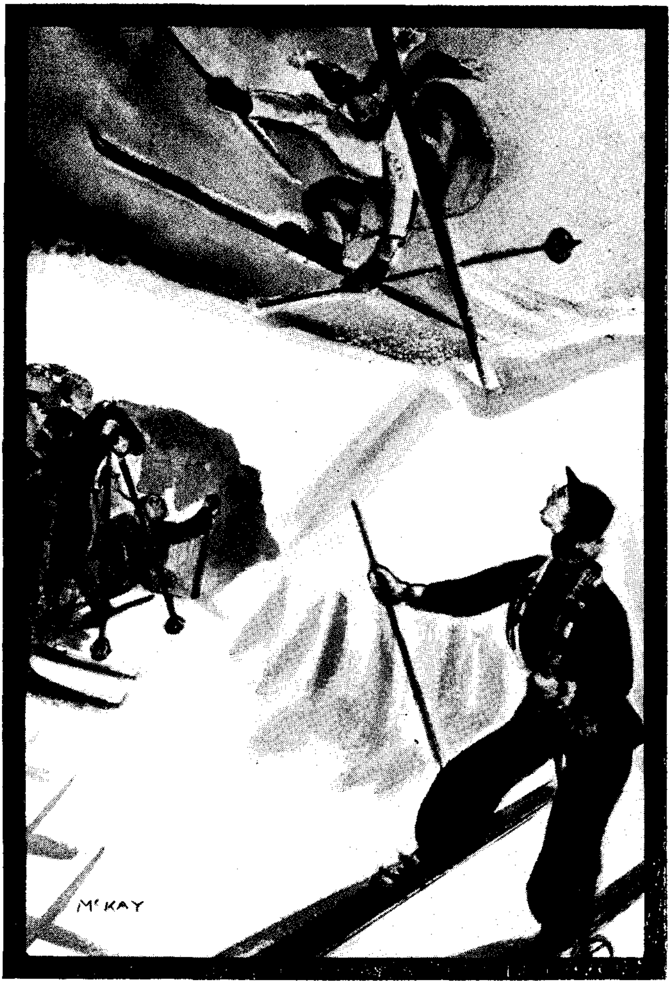
"It's darling—my maid has one just like it."



"Yours is nice too, Miss Tyson."

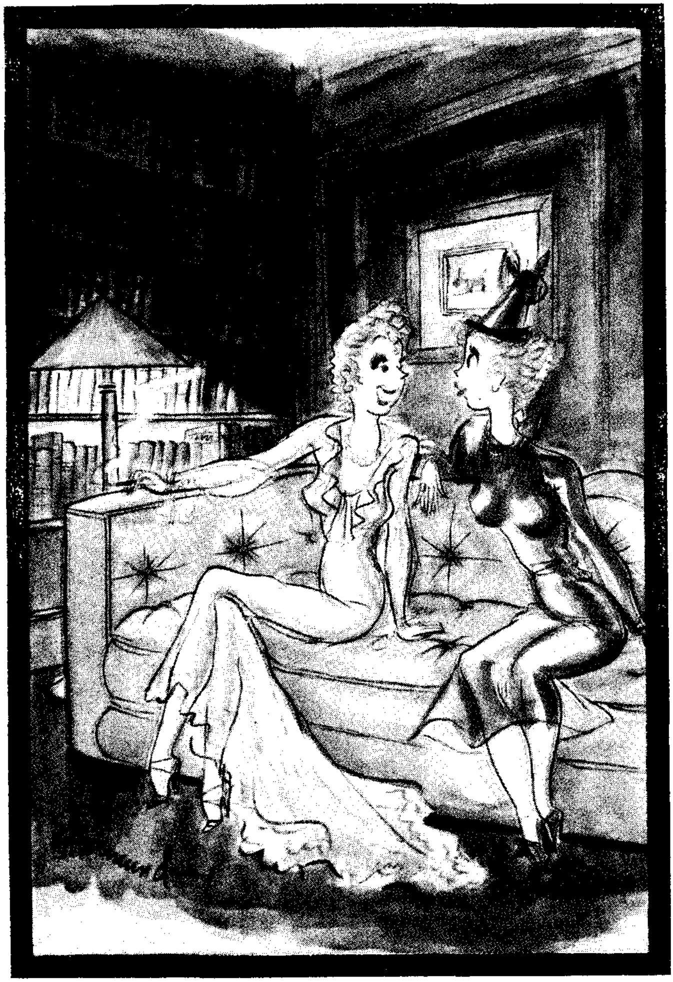


"She's in an awful predicament—Frank Buck took her husband—alive!"

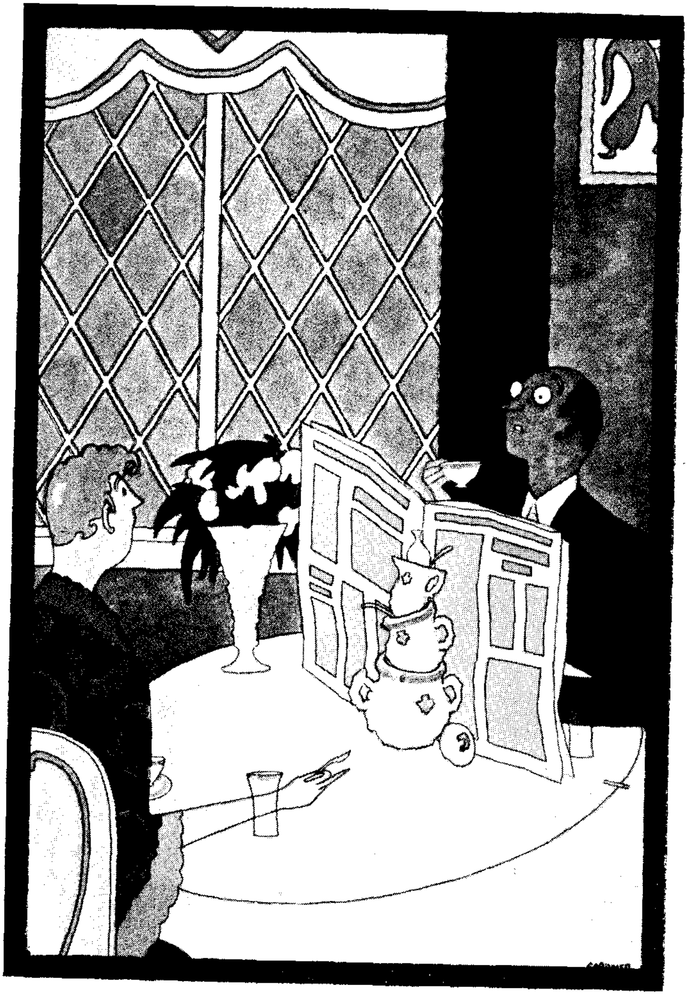


"Henry, stop showing off—people will think you're conceited!"

"Let me get it—you got it last Sunday."



"I got them with the apartment—they'll come in handy in case I ever want to read."



"Couldn't you do without sugar this morning, darling? I'm using it to prop up my paper."

COLOR AS A FORCE

THERE'S MUCH TO LEARN ABOUT IT INCLUDING WHAT IT DOES TO US

When Piccard made his first jaunt into the stratosphere the gondola of his balloon was painted black. The stratosphere has a constant temperature of 75 degrees below zero. Yet the black of Piccard's little ark caught the rays of the sun, stopped them, converted them into heat and created a sweltering temperature of 100 degrees above zero. On his second trip he painted the gondola white. The rays of the sun glanced off this time and he shivered in a temperature bordering on the freezing point.

When the Arab wears white he defies the sun, and its attack of rays is thwarted like so much rain against a pane of glass. When people wear white and tints of yellow, blue and green in summer the result is not only pleasing to see but also easy on the skin.

For the same reason you feel warmer in winter when snow is on the ground than when it isn't—temperature the same. The white spreads the heat all around and doesn't let it bury itself in the ground.

Color, you see, does a lot of physical things—particularly if you give it a chance. Color is light, and light contains heat. Summer shacks ought to be white or some light color, and so should water tanks and tents and radiators. In this connection, here is an old tradition upset by the U. S. Bureau of Standards: "The effect of adding metallic paint is equivalent to removing one-sixth of the radiator or nearly 17 per cent. Or as if one section out of six had been removed. Thus a radiator of five sections painted white or with light colored paint should be about as efficient as another of six sections painted with metallic paint."

For your happiness, color isn't all a matter of art or culture. And so, too, for your safety and comfort. Orange has been proposed as a better color than red for bottles of poison. It's easier to see and it doesn't look gray to the five per cent of male population afflicted with color blindness. Yellow has already taken over many jobs of making fire hydrants and highway signs conspicuous. Many nitroglycerin trucks, tanks and "buggies" are today yellow or white. Yellow puts red to shame for being imperious. Black on yellow has for a long while replaced black on white for traffic signs. The combination is fully a third more legible and doesn't confuse the eye.

In book publishing, the glint of yellow in paper stock conserves vision. Amber chalk has already invaded the schoolroom. White, because it reflects all the qualities of light—the bad with the good—breaks down the nerves on the retina far more rapidly than yellow or ivory. White is in league with ultra-violet radiation. These waves are all right to charge vegetables with vitamins, but they bother the eye, cause headaches and otherwise spread misery in the natural art of seeing. The attempt to bring bluish daylight illumination into the home is like trying to develop 110 degrees in winter with a heating plant or 32 degrees in summer with air conditioning. The light of any ordinary electric lamp is excellent for the eye. There should be plenty of it, and a normal yellowish tint is even better than white. Otherwise you may have to sit around the house wearing amber glasses. Brightness, not whiteness, is the supreme quality of daylight.

White, after all, is almost a phobia with modern civilization. Snow excepted (and snow will blind you in an hour if you don't protect yourself), white is about the scarcest thing in nature and one of the most common things in a modern factory, office, home or apartment.

A prominent decorator once told me that "white is the best thing for walls. It is neutral and it blends with everything!" This is preposterous. To brand white as neutral is as descriptive as putting the word "water" on the handle of a faucet.

If you've read *Moby Dick*, you may remember the hair-raising description of white as the most portentous, desolate and heinous of all visual sensations.

White is terrible when you get too much of it. It hurts the eyes. Worse than this, it makes you feel sterile and naked and as vacant as shadow. Neutral? It puts restaurants out of business and hospitals out of patients. Red, yellow, green and blue are driving it out of kitchens and bathrooms. The foothold it still has, particularly in industry and in many drawing rooms, is thankfully being pried loose.

The great rumpus about it came when the American lust for brightness and sanitation hit gas light between the eyes and drove crackers from barrels to packages. Clean things in nature, clouds and snow, were white. White paints produced the most candle feet of illumination. White, therefore, was godly, for it shamed the evil of dirt and squeezed every ray of good out of every light bulb.

Hospitals have learned the lesson. Blue-green is mighty common in operating rooms. It rests the surgeon's eyes, complements the sanguinary job he's struggling with, and makes him a few jots surer with the knife. Private hospital rooms, wards, corridors are blossoming. In a recent experiment, a jobber furnished a set of private rooms in color on speculation. Rates were boosted to pay for the expense involved. The demand was so great from other patients, and the nurses were so keen to have their duties changed to this floor, that the superintendent had to put the rooms back into their original and more or less staid condition. He couldn't afford to put the whole building on this basis, and he couldn't tolerate the addition of color because it made the rest of his institution too drab by comparison!

Yet color has fascination because it is ribald just as much as it is an angel of visual and emotional mercy. People rally to it. An insane asylum in Illinois uses red to perk up cases of melancholia. Blue is tried with good results on neurotics. People with shattered nerves have found comfort in a room bizarrely decorated with gaudy checks and stripes of color—because their jitters were given a sensory outlet and didn't gag in their minds. Color doesn't cure, but it does handle human moods expertly.

Green light has been tried on criminals in a mirrored room to make their guilt seem written on their faces and therefore obvious to the world. "Mood conditioning" is coming into vogue in room illumination. The movies are already working the emotion of hue into the new colored films. Blue and red, foremost in sensation, are going to make you feel the way a producer wants you to feel. Maybe the salaries of the stars will be cut—color will draw a shiver or a thrill much more cheaply than pantomime or pathos.

You like bright colors best in small areas, not in large areas. You have reasons for this discrimination that are not altogether esthetic. Strong blue in a large area makes the eye nearsighted; red in a large area makes it farsighted. Simply, too much of either sensation tires the muscles of your eye—and sore eye muscles are far worse than any charley-horse in the leg.

Fundamentally you distinguish four unique colors, red, yellow, green, blue. These are quite unalike. All other colors bear resemblance to them. Further than this, your preference for colors will change as their forms change. In a word, you are likely to be keen about pure red but not about pink. You may not like orange, but orange mixed with black to form brown may get you to raise your hand in a hurry. You prefer blackish shades of warm colors and whitish tints of cool colors. Green you consider the safest color of all if you have the job of buying a present for someone you don't know. Or if you do know the person, you're likely to choose green anyhow. Green, you see, seems to fit in everywhere, whether you like it or not. The mail-order houses, incidentally, sell green and ivory stoves only!

The full possibilities of color use are still to be understood. But since science and psychology have discovered so much about color and its meaning as sensation, the doors to a new expression are wide open.

—Faber Birren

THIS PAGE will henceforth be devoted to announcements calculated to be of interest to CORONET'S readers. You will note that the magazine's character is subject to constant slight change. Comments on these changes and queries of reader-opinion on other proposed changes will be presented here.

* * *

FIRST you will notice that the legibility of the TYPE pages has been considerably improved, in response to many requests for this change after the appearance of the November and December issues. Second you will note that the proportion of the total pictorial space devoted to ART SUBJECTS has been greatly increased. This move was also made in response to urgent demand.

* * *

MANY letters have asked for identification of the November and December COVER PAINTINGS. The first was PORTRAIT OF A YOUNG WOMAN by Peter Dubordieu, and the second was YOUNG GIRL by Arendt de Gelder. Both pictures are in the permanent possession of the Art Institute of Chicago. You will notice that we have begun with this issue the practice of giving the identification of the painting on the cover itself, with a further note as to its source in the table of contents on the inside front cover.

* * *

THERE have been many requests for Salon size (11 x 14) PRINTS OF PHOTOGRAPHS reproduced in CORONET. In most instances, the inquirers have offered to pay "any reasonable amount." We will have to complete arrangements with the individual photographers, who naturally must receive as royalty a part of whatever price is charged for these large contact prints from the original negative. So far, the photographers have been no better able than ourselves to decide what would be a reasonable price to charge for these large prints, assuming that they would probably be sold in considerable quantity. We suggest $1.

* * *

THE February issue will have a number of noteworthy features. Corresponding to the two WATCH color page sections in this issue there will be a portfolio of full color reproductions of CARNETS DE BAL, little souvenir dance programs of the last days of the French court, exquisitely designed and made of gold, enamel and jewels, with miniature portraits on ivory by Fragonard and Gault St. Germain. If you liked the JUGO-SLAV SYMPHONY of photographs in this issue you will like the HUNGARIAN RHAPSODY, an even larger portfolio of photographs by Gyula Ramhab of Budapest. Then, too, there will be paintings in full color by Renoir, Pissaro, Vlaminck, Utrillo, Soutine, Chagall and other moderns, as well as some paintings of the seventeenth and eighteenth centuries. And of course, the incomparable Kley elephants.

* * *

The new issue of CORONET appears on the 25th of each month.

CORONET

for

JANUARY

1937

Continued from inside front cover

WATCH COLOR PLATES

Section One (17th and 18th Century) 85-92
Section Two (18th and 19th Century) 105-112

COMICAL:

CARTOONS

"Will that be all, sir?" . Baer 139
"I'll tell you just what . . ." Campbell 140
"I'm sorry, sir, but . . ." De Sarro 145
"Er—Madame—this is the . ." McKay 146
"I'd have gotten . . ." McKay 153
"He can't remember . . ." Shellhase 154
"Don't get up . . ." Shellhase 177
"He has so many . . ." McKay 178
"It's perfect—one more . . ." Baer 183
"It's darling—my maid . . ." Baer 184
"Yours is nice too . . ." Bundy 185
"She's in an awful . . ." Dell 186
"Henry, stop showing . . ." McKay 187
"Let me get it . . ." Shellhase 188
"I got them with . . ." Shermund 189
"Couldn't you do without . . ." Rea 190

PHOTOGRAPHS:

PORTFOLIO

Jugo-Slav Symphony Kocjancic 25-37

STUDIES

Light . . . . Quigley 62
Motion . . . . Sheeres 63
Body . . . . Perckhammer 64
. . . and Soul . . . . . Barry 65
China Shop . . . . Westelin 66
Heart of a Rose . . McFerran 67

SEASONS

Old-World Chicago . Mueller 68
Geese on Ice . . . . . Scherl 69

NATURE

Insect Portrait . . . . Croy 70
Flies & Flowers . . . . Zuber 71

ANIMALS

Peter Pendergrast . . Wertz 72
Loco Steer. . . . . . Relang 73
The Cynic . . Seidenstücker 74
The Wit . . . Seidenstücker 75

HUMAN INTEREST

Mt. Hood . . . . . Atkeson 122
Fury . . . . McFerran 123
Sidewalk Chess . . B. Lohse 124
Eyes West . . . . . . Luthy 125
Chorus Routine . . Westelin 126
The Great Waltz . Westelin 127

LANDSCAPES

Central Park . . Wishengrad 128
Vesper Sky . . . . . Wallace 129

MARINE

Open Ocean . . . . Tschira 130
High Noon. . . . . P. Wolff 131

CHILDREN

Sunday Morning . Westelin 132
Weltschmerz . . . . . Tatzel 133
Son of India . . . . . Henle 134
Daughter of India . . Henle 135

STRANGE

Copper & Aluminum Westelin 160
Spectacles. . . . Von Mihes 161
Wool Pup . . . . . . Archer 162
Halved Peach . . . Westelin 163

PORTRAITS

Age Defeated . . Kaufmann 164
Age Undaunted . . . . Blok 165

STREET SCENES

Boul Mich . . . . . Wallace 166
Allen Street . . Wishengrad 167

COMPOSITION

Three Graces . . . Westelin 168
Sonja Henie . . Eisenstaedt 169
Boxes, La Scala . Eisenstaedt 170
Platz, Budapest A. B. C.-I. Rona 171
"These be Three . . ." McFerran 172
Evensong . . . . Barry 173

ARNOLD GINGRICH
EDITOR

Manuscripts, photographs and drawings should be addressed to Arnold Gingrich, Editor, c/o CORONET, 919 North Michigan Avenue, Chicago, Illinois, and must be accompanied by postage or by provision for payment of carrying charges if their return is desired in the event of non-purchase. No responsibility will be assumed for loss or damage of unsolicited materials submitted. Subscribers' notices of change of address must be received one month before they are to take effect. Both old and new addresses should be given.

RINTED BY
TEINER CORPORATION
ICAGO, U. S. A.